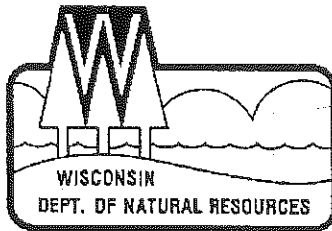


## APPENDIX O

*APPENDIX O*

*WIDNR CORRESPONDENCE FOLLOWING INITIAL SUBMITTAL*



George E. Meyer  
Secretary

## State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Southeast District - Annex Building  
Post Office Box 12436  
4041 N. Richards St.  
Milwaukee, Wisconsin 53212  
TELEPHONE: 414-961-2727  
TELEFAX #: 414-961-2770

December 9, 1994

In Response Refer To: FID#241384000  
County of Milwaukee  
HW/LIC/cogfrpoi.d94

Mr. Michael Villione, President  
EOG Disposal, Inc.  
5611 West Hemlock Street  
Milwaukee, WI 53223

Subject: Feasibility Report and Plan of Operation Notice of Incompleteness  
EOG Disposal, Inc. (EOG) 5611 West Hemlock, Milwaukee, WI  
EPA I.D.#: WID 988580056

Dear Mr. Villione:

We have completed our review of your feasibility report and plan of operation (FRPO) for storing hazardous waste at your facility. Based upon this review we have determined that the FRPO does not contain the minimum information required by chs. NR 600 through 685, Wisconsin Administrative Code. Points of incompleteness are identified in this letter. A response addressing these points of incompleteness should be submitted within 30 days of the date of this letter. Your timely response to this letter will assist you in moving more quickly towards your goal of obtaining a final operating license for the proposed and existing hazardous waste licensed activities at your facility.

Your report, *EOG, Feasibility and Plan of Operation Report for a Hazardous Waste Storage Facility*, was submitted by EOG in September of 1994. The report was prepared by RMT, Inc. of Waukesha, WI. EOG is operating a limited hazardous waste storage facility under a interim license issued by the department to EOG on March 15, 1994. With condition #2 of the interim license determination, the department required EOG to submit a FRPO.

EOG's FRPO is a well organized document. In submitting information in response to this letter, the department would prefer that EOG submit replacement pages or additional pages to the original document. Any replacement pages or additional pages should be marked as such and include the date of the response submittal. EOG shall submit a cover letter explaining their responses to these individual points of incompleteness.

The following information must be submitted within thirty days of the date of this letter. I am addressing both points of completeness and points of adequacy in this letter. When I refer to an attachment, section, page and paragraph, I am always referring to the proposed September 1994 FRPO.



General Concerns

1. Throughout the FRPO flammable is used interchangeably with ignitable. The hazardous waste regulations apply to ignitable wastes not flammable wastes. EOG should not use flammable interchangeably with ignitable. EOG shall change any inappropriate uses of flammable in the FRPO.
2. EOG should not reference the federal code unless the state has not promulgated comparable regulations. EOG shall change any inappropriate references to the federal code in the FRPO.
3. EOG shall provide information to answer whether s. 144.44(4R), Wisconsin Statutes, applies to their facility. In order to determine applicability, EOG shall provide adequate information to demonstrate whether or not this statute applies.
4. EOG shall provide information on the other tenants residing in the Megal Corporation building.
5. EOG speaks of exempt recycling activities and reclamation operations in the FRPO. The department would like to see EOG present specific information on each of these processes. EOG should receive concurrence from the department that their recycling activities are exempt activities and not treatment. (attachment 7, section 1, page 5, paragraph 3)
6. If some of the operations at the facility that were thought to be recycling should be actually regulated as treatment, EOG shall update the FRPO to reflect licensed treatment activities. ss. NR 640.06(3), and NR 645.06(3), Wisconsin Administrative Code.
7. EOG shall provide more specific information on the liquification process at the facility including what is liquified.
8. EOG shall explain what is done with the solvents recovered from the vapor recovery unit.
9. Attachment 7, section 2.5, page 14, references drum pumping stations. EOG shall provide more information on these drum pumping stations, including at a minimum where the drum pumping stations would be located throughout the site and a description of the associated piping.
10. EOG shall provide more specific information on the blending tank. This information shall include the types of waste that are blended, (hazardous characteristic waste oils, solvents, listed hazardous waste, etc.), what wastes are blended with what other wastes, what wastes are never blended together, and whether the wastes are shipped offsite as hazardous wastes. If hazardous wastes are blended in the tank and the wastes from the tank are sent offsite as a hazardous waste, the department would apply the same requirements for a hazardous waste



storage tank to the blending tank. If this is the case EOG shall show how the blending tank complies with the requirements for a hazardous waste storage tank and submit the same information that would be required for licensing that tank.

11. Attachment 7, section 2.3, page 10, paragraph 4, references, " a suitable blended condition." EOG shall provide a clearer explanation of what is "a suitable blended condition."
12. EOG shall provide a clearer explanation of the drum auger operation at the site. This information shall at a minimum include; a plan sheet of the auger operation, whether both solid and hazardous waste will be processed in the auger, whether solids from the auger would be treated as a solid or a hazardous waste (attachment 7, section 2.2, page 9), how solids will be transferred from the solids auger (whether the solids will be pumped), and the decision making process used to determine where the solids will be transferred.
13. EOG shall provide more information on containment in all of the loading and unloading areas. This information shall include specifications. EOG shall also explain how dock #2 is designed to contain precipitation. (attachment 7, page 8)

General Report Requirements (ch. NR 680, Wisconsin Administrative Code)

14. EOG shall submit plan sheets showing site construction and operation topography. These plans should show how final construction will fit into the existing landscape. This should include cross sections, and construction specifications which show foundations of the facility structures. s. NR 680.05(1)(c)4.f., Wisconsin Administrative Code.
15. EOG shall submit a signed copy of the proposed Part A application. s. NR 680.06(3)(a), Wisconsin Administrative Code.
16. EOG shall submit a Part A application for the existing facility that contains the even number pages. s. NR 680.06(3)(a), Wisconsin Administrative Code.
17. EOG shall provide a chemical and physical analysis of the hazardous waste to be handled at the facility. At a minimum, these analyses shall contain all of the information which must be known to store the waste in accordance with chs. NR 600 through 685, Wisconsin Administrative Code. s. NR 680.06(3)(b), Wisconsin Administrative Code.
18. Attachment 3, appendix E, section 1.1, page 3, refers to the recent extension of RCRA regulations to now include small quantity generators. EOG shall provide a further explanation of what is meant by that statement. s. NR 680.06(6), Wisconsin Administrative Code.





19. EOG shall provide information on any other statutory authority or local, state or federal approvals that apply to the facility. s. NR 680.06(6)(a)2., Wisconsin Administrative Code.
20. EOG shall provide information on any emissions or discharges associated with preparation and construction of the facility. s. NR 680.06(6)(a)4., Wisconsin Administrative Code.
21. I could not find information on other anticipated changes with facility development. The checklist points out that the information should be in attachment 3, appendix D, section 6. Even assuming appendix E, (see condition #95), I could not locate the information. EOG shall provide such information or point out where such information is located in the FRPO. s. NR 680.06(6)(a)5., Wisconsin Administrative Code.
22. Attachment 2, section 3, page 2, states, "No other permitted facilities in geographic proximity to EOG would offer the diversity of hazardous waste recycling nor the distribution of service." EOG shall explain what they consider to be in the geographic proximity to EOG. EOG shall also explain in more detail their, "diversity of hazardous waste recycling," and their, "distribution of service." In attachment 2, section 5, page 2, EOG states that their, "service area extends through out the United States." EOG shall discuss in further detail a breakdown of their service area and how their other branch offices work with the Milwaukee facility. s. NR 680.06(8), Wisconsin Administrative Code.

Waste Analysis Plan (ss. NR 680.06(3)(c), and NR 630.13(1), Wisconsin Administrative Code)

23. EOG shall explain the criteria for blending of wastes. EOG shall also explain what will be done to ensure that only compatible wastes are blended. EOG shall present a clearer more concrete description of how incompatible wastes and reactive wastes are determined and separated.
24. Much of hazardous wastes shipped today can have multiple waste codes. EOG shall explain how wastes received at their site with multiple waste codes will be processed through their system and whether they anticipate any problems will occur. EOG shall explain if any waste codes will be lost through the consolidation or processing of the waste.
25. EOG shall explain who fills out a waste profile sheet and whether the form is always completely filled out.
26. EOG shall explain what are the minimum requirements that are required on a generator's or broker's waste identification form.
27. EOG explains that, "pre-qualification samples are periodically requested for verification and generators shall be requested to periodically re-



submit waste identification forms." EOG shall explain what is meant by "periodically." The department would like to see a consistent system in place.

28. EOG's use of the descriptor with the table of the list of wastes to be managed on site looks good. The department would like to see EOG add an additional descriptor which would be whether the waste will be sent offsite for use as a secondary fuel.
29. EOG shall clearly define what is involved in the precertification process. (attachment 3, section 4, page 31)
30. Attachment 3, section 4, page 31, mentions that, "the materials may be analyzed for the following parameters in an onsite laboratory to determine their acceptability based on the schedule presented in Section 8, Analysis Plan." EOG shall explain whether materials will always be analyzed based on the schedule.
31. Attachment 3, section 7.3, page 37, mentions, "sampling bulk load solids may be done by taking random samples throughout the load." EOG shall explain whether bulk load solids will always be sampled.
32. Attachment 3, section 5.1, page 32, talks about the receipt of containerized loads. EOG shall rewrite this section so that it is clear what tests are done, when and where the tests are done, and on what wastes the tests are done. The department needs to know how often the waste is sampled.
33. Attachment 3, section 5.1, page 32, mentions that, "containers shall also be randomly chosen for analysis and inspection." EOG shall explain more clearly how this choosing of containers is done.
34. Attachment 8, Spill Prevention Control and Countermeasures Plan, figure 1, Flow Diagram, page 18, contains a very well done and useful flow chart. The department feels it would be a benefit to also include this flow chart in the waste analysis plan and add the analysis done at each stage for waste received from offsite and include the type of analysis.
35. Attachment 3, section 5.2 and section 5.3, page 33, both mention, "and any other analysis as deemed necessary by management." EOG shall discuss what other analyses would be performed and when would they be deemed necessary.
36. EOG shall explain if any analysis is performed on lab packs. EOG shall also explain whether the contents of the lab packs will be emptied and combined with like materials. If EOG plans to combine the contents of the lab packs, the department feels that some type of compatibility testing will need to be performed. (attachment 3, section 5.4, page 34)



37. After EOG signs off on the manifest, they are unable to send the waste back to the generator unless the generator is a licensed facility able to receive waste from offsite. EOG shall include a statement in the waste analysis plan that reflects this issue. (attachment 3, section 6, page 35)
38. EOG shall explain how they could reject only a part of a bulk load. (attachment 3, section 6.2, page 5)
39. Attachment 3, section 6.4, page 36, concerns the rejection procedures for polychlorinated biphenyl loads. If PCB's are received at the site in units other than lab packs, EOG shall change the wording to reflect the use of other units.
40. EOG shall explain what products are produced at the facility. (attachment 3, section 11, page 61)
41. In attachment 3, table 2, pages 39 through 58, EOG shall list what are each of the "other" tests.
42. EOG shall explain whether the analyses listed in attachment 3, table 2, pages 39 through 58 are the only analyses performed on the waste and when these analyses would be performed on the waste.
43. EOG shall explain who will be performing the waste analysis.
44. EOG shall state that the chemical and physical samples will be analyzed by a laboratory certified or registered under ch. NR 149, Wisconsin Administrative Code, as required by ss. NR 630.13(2) and (4), Wisconsin Administrative Code.

Container Requirements (ch. NR 640, Wisconsin Administrative Code. Tank requirements, (ch. NR 645, Wisconsin Administrative Code), included if they also apply)

45. The FRPO mentions "these drawings" in attachment 7, section 2.4, page 13, paragraph 4. EOG shall provide more specific information on what "these drawings" are and where they are located.
46. I understand EOG is located on two separately owned properties. EOG shall clearly explain the division of the two properties, clearly identify the two property owners, explain how this division of the two properties will be handled for the operation of this site, and explain what problems would be anticipated in having two separate property owners and how those problems would be addressed. EOG shall explain how the second property owner will be kept informed of activities going on at the site. ss. NR 640.06(1)(a)2., and 645.06(1)(a)2., Wisconsin Administrative Code.



47. EOG shall include in the FRPO whether any parks, hospitals, or nursing homes are within a 1/2 mile radius of the facility. s. NR 640.06(1)(a)3., Wisconsin Administrative Code.
48. EOG lists facilities from all over the country from which they would be accepting waste. EOG shall explain whether these wastes would be going to the Milwaukee site or one of their other sites. ss. NR 640.06(1)(a)4., and NR 645.06(1)(a)4., Wisconsin Administrative Code.
49. EOG shall provide a response to the material balance informational request of ss. NR 640.06(1)(a)5. and 7., and NR 645.06(1)(a)5. and 7., Wisconsin Administrative Code, or explain where this information is located in the FRPO. I could not locate this information in attachment 3, section 7.
50. 17. The area north of the Megal Corporation building is where traffic will enter the site and access to the site will be controlled. EOG shall provide a clearer description of the area north of the Megal Corporation building. ss. NR 640.06(1)(a)6., NR 640.06(1)(c)6., NR 645.06(1)(a)6., and NR 645.06(1)(c)6., Wisconsin Administrative Code. EOG shall also explain where trucks will be parked when they are waiting to enter the EOG property while multiple loads are being delivered to EOG. ss. NR 640.06(1)(h)4., and NR 645.06(1)(h)4., Wisconsin Administrative Code.
51. EOG shall identify the persons or person responsible for plant construction. ss. NR 640.06(1)(a)8., and NR 645.06(1)(a)8., Wisconsin Administrative Code.
52. EOG shall explain whether an air management permit will be needed for the site. EOG shall present more specific information on air emissions than what is in attachment 3, Section 10.1. ss. NR 640.06(1)(a)9., and NR 645.06(1)(a)9., Wisconsin Administrative Code.
53. EOG shall provide further information on the facility layout including building and structures foundation, sizing of receiving areas, sizing of major processes and processing equipment. ss. NR 640.06(1)(a)12., and NR 645.06(1)(a)12., Wisconsin Administrative Code.
54. EOG shall explain the timing of the construction of the new site. EOG explains that the facility will be constructed in a phased approach. The department would like the specifics of the plan because the phased construction might affect the coordination of the licensing at the facility. EOG shall provide a time table for start up and operation of the various units at the site. ss. NR 640.06(1)(a)13., and NR 645.13(1)(a)13., Wisconsin Administrative Code.
55. EOG shall explain what provisions will be taken during the construction of the facility to ensure protection of groundwater and surface waters.





ss. NR 640.06(1)(a)15., and NR 645.06(1)(a)15., Wisconsin Administrative Code.

56. In addition to identifying the surrounding businesses, EOG shall identify the surrounding property owners. ss. NR 640.06(1)(b)7., and NR 645.06(1)(b)7., Wisconsin Administrative Code.
57. A site conditions map indicating surface waters, wetlands and intermittent streams is not shown in attachment 15, sheet 7 of 18, as listed in the location comments. EOG shall provide a site conditions map showing surface waters, wetlands and intermittent streams. ss. NR 640.06(1)(c)2., and NR 645.06(1)(c)2., Wisconsin Administrative Code.
58. Runoff control systems, and storm, sanitary and process sewerage systems are not presented on the site conditions map in attachment 15, sheet 3 of 18 as listed in the location comments. EOG shall provide a description of runoff control for the site and a description of the sanitary and storm sewers on the site. EOG provides the existing storm sewers in attachment 15, sheet 2 of 18, but EOG should also provide any proposed storm sewers or changes. EOG shall also present the drainage patterns for the site. ss. NR 640.06(1)(c)10., and NR 645.06(1)(c)12., Wisconsin Administrative Code.
59. The site conditions map in attachment 15, sheet 3 of 18, does not show any barriers for drainage. EOG shall provide a site conditions map that shows any barriers to drainage on the site. ss. NR 640.06(1)(c)11., and NR 645.06(1)(c)13., Wisconsin Administrative Code.
60. EOG shall provide more detailed construction drawings for the whole site. I would like specifications on the following items:
  - a. the container auger.
  - b. drum emptying under a nitrogen blanket
  - c. the containment areas and the process/storage building (specifically the areas around the doorways)
  - d. the blending tank and associated equipment
  - e. tank foundations
  - f. tank design specifications
  - g. the associated piping at the site and the pipe joints.ss. NR 640.06(1)(d), and NR 645.06(1)(d), Wisconsin Administrative Code.
61. EOG shall provide an engineering plan that shows final site topography. EOG shall also show whether the final grade for the site will affect the proposed boundary fence, and if any fill will be added to build up the northeast corner of the site. ss. NR 640.06(1)(d)4., NR 640.06(1)(g)2., 645.06(1)(d)3., and NR 645.06(1)(g)2., Wisconsin Administrative Code.



70. Flammable wastes are mentioned as being located at least 50 feet from the facility's property line but nothing is mentioned about the location of reactive wastes. EOG shall explain how they will comply with the buffer zone requirements for reactive wastes. ss. NR 640.06(2)(c), and NR 640.14, Wisconsin Administrative Code.
71. EOG shall provide more information to show how the facility will be in compliance with the requirements for incompatible wastes. ss. NR 640.06(2)(c), and 640.15(1), Wisconsin Administrative Code.
72. EOG shall provide more extensive information in the operations and maintenance manual on specifications for site construction and operation and descriptions of daily operations. ss. NR 640.06(2)(d), and NR 645.06(2)(d), Wisconsin Administrative Code.
73. EOG shall provide an example of daily operating records. ss. NR 640.06(2)(d), and NR 645.06(2)(d), Wisconsin Administrative Code.
74. EOG shall explain how precipitation runoff will be managed at the site. ss. NR 640.06(2)(d)3., and NR 645.06(2)(d)3., Wisconsin Administrative Code.
75. EOG shall provide in the closure plan a description of possible land uses after closure. I could not locate this information in attachment 11, section 12, as indicated in the location comments. ss. NR 640.06(2)(e)2., 640.16, NR 645.06(2)(e)2.b., NR 645.17, and 685.05, Wisconsin Administrative Code.
76. Attachment 11, page 16, table 3, shows a discrepancy in the number of samples for the bulk solids storage container management area between the number of samples column and the description column. EOG shall resolve this issue and show consistency. ss. NR 640.06(2)(e)2., NR 640.16, NR 645.06(2)(e)2., 645.17, and NR 685.05, Wisconsin Administrative Code.
77. EOG shall provide the anticipated time before closing and any anticipated partial closures. ss. NR 640.06(2)(e)2., NR 640.16, NR 645.06(2)(e)2., NR 645.17, and NR 685.05, Wisconsin Administrative Code.
78. In your comment on location of information for ss. NR 640.06(2)(e)3., and NR 645.06(2)(e)3., Wisconsin Administrative Code, EOG shall explain where is appendix B.
79. For the contingency plan to stand on its own as an independent document, EOG should include the following information in the plan or reference where the information can be found in the plan.
  - a. information on the communication systems and their locations,
  - b. the location of safety equipment and emergency equipment in a layout of the whole facility, and



- c. a listing of the types of wastes, their hazards and where they are stored.

ss. NR 640.06(2)(f), NR 645.06(2)(f), NR 630.21, and NR 630.22(1) and (2), Wisconsin Administrative Code.

- 80. Attachment 8 addresses equipment failure and power outage. EOG shall also include in the plan whether any backup equipment is kept on site. ss. NR 640.06(2)(f), and NR 630.21, Wisconsin Administrative Code.
- 81. EOG shall provide a clearer discussion on how the aisle space requirements of s. NR 640.08, Wisconsin Administrative Code will be met.

Tank Requirements (ch. NR 645, Wisconsin Administrative Code)

- 82. EOG shall specify what types of tests will be performed on the tanks. s. NR 645.08, Wisconsin Administrative Code.
- 83. In Attachment 7, section 3, page 15, paragraph 3, EOG shall specify what tests will be performed on the tanks, "as required." s. NR 645.08, Wisconsin Administrative Code
- 84. EOG shall provide further information on the feed systems, safety cutoff, the systems for monitoring tank levels in the tanks, bypass systems, pressure controls such as vents, and all leak detection devices. s. NR 645.06(1)(i)3., Wisconsin Administrative Code.
- 85. EOG shall provide information to show compliance with the buffer zone requirements for tanks holding ignitable or reactive wastes. ss. NR 645.06(2)(c), and NR 645.13(2), Wisconsin Administrative Code.
- 86. EOG shall provide a more detailed description of how the tank systems shall be installed in compliance with ss. NR 645.08(2), (4) and (5), referenced from ss. NR 645.06(1)(i)1. and 6., Wisconsin Administrative Code. EOG shall confirm that the tanks will be tested after they are constructed and put into place.
- 87. EOG shall provide a more detailed description of how the secondary containment system for each tank system is designed and constructed to meet the requirements of ss. NR 645.06(1)(i)7. and 9., and 645.09(3) to (8), Wisconsin Administrative Code. In addition to attachment 7, the location indicated in the location comments, some of the information was located in attachment 8, appendix A.
- 88. EOG shall provide calculations to show that if a hole is punctured in the wall of the tank near the containment area wall, that the spray of liquid coming out of the tank from the hole will remain in the



containment area. ss. NR 645.06(2)(a), and NR 645.09, Wisconsin Administrative Code.

89. The roofing overhang on the tank farm will not leave the tank farm containment area completely free of precipitation. Although the containment seems to be designed with plenty of extra capacity, EOG shall address how precipitation will be handled that accumulates in this outside containment area. s. NR 645.09, Wisconsin Administrative Code.

Typographical Corrections

90. Attachment 10, section 2, page 2, paragraph 1, refers to the personnel training, "regulatory requirements of WAC 630.11". The reference should be changed to, "WAC 630.16".
91. In attachment 10, section 2.2, page 4, the last line should add "aid" after "basic first."
92. Attachment 3, appendix E, section 1.1, page 1, states, "so old that *the* are unusable," should be changed to, "so old that *they* are unusable."
93. Attachment 3, appendix E, section 4.4, page 17, should read as, "revenues for the company."
94. In the location comments under environmental review, NR 680.06(6), you refer to attachment 3, appendix D. This information is located in Attachment 3, appendix E.
95. Attachment 5, section 5, page 32, paragraph 1, refers to "NR 630.12(g)" and should be changed to "NR 630.12(4)".
96. In attachment 7, section 2.1, page 7, paragraph 1, reads as, "or further consolidation," and should be changed to, "for further consolidation."
97. Attachment 7, section 2.2.2, page 9, paragraph 2, reads as, "transferred to the *field* blending operation," and should be changed to "transferred to the *fuel* blending operation."

Please submit to the department four copies of all information provided in response to this letter.

For your information, this letter is not a denial of the feasibility report and plan of operation, but merely indicates that the department has not received the minimum information as required by chs. NR 600 through 685, Wisconsin Administrative Code. Once you have satisfied the minimum informational requirements, the department will review your submittal and render a determination on your feasibility report and plan of operation.



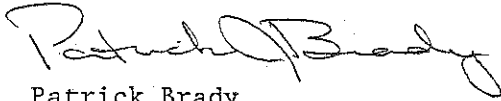


Mr. Michael Villione, EOG's FRPO NOI - December 9, 1994

13

Should you have any questions on the department's review, please feel free to contact me at telephone number (414)961-2717.

Sincerely,

A handwritten signature in cursive script, appearing to read "Patrick Brady".

Patrick Brady  
Waste Management Engineer

- c. SED Casefile (W. Ebersohl, P. Brady)  
Bureau - SW/3 - HWMS (E. Lynch)  
RMT, Inc. - (D. Wierman)



February 27, 1995

Mr. Pat Brady  
Wisconsin Department of  
Natural Resources  
4041 North Richards Street  
P.O. Box 12436  
Milwaukee, WI 53212

RE: Feasibility Report and Plan of Operation  
Notice of Incompleteness Response for Non-Design Related Issues  
EOG Disposal, Inc. (EOG) 5611 West Hemlock, Milwaukee, WI  
EPA I.D.#: WID 988580056

Dear Mr. Brady,

On behalf of EOG Disposal, Inc., RMT has prepared a response to your letter of incompleteness dated December 9, 1994 for EOG's September 1994 FRPO submittal. Your letter addressed both points of completeness and points of adequacy.

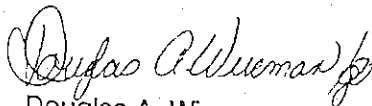
As requested in your letter, EOG has submitted the following information as replacement pages and/or additional pages to the original document. All replacement pages and additional pages have been marked as such and include the date of this response submittal.

This response has been prepared on a point by point basis from the December 9, 1994 Notice of Incompleteness letter for ease of review. As discussed during our January 3, 1995 meeting with you, EOG has responded only to the non-design related issues of incompleteness and inadequacy at this time.

We trust this information is sufficient for your review. We look forward to WDNR's issuance of EOG's operation license.

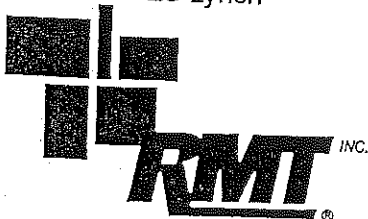
Sincerely,

RMT, Inc.



Douglas A. Wierman  
Project Manager

cc: Mike Vilione  
Henry Krier  
Tom McElligott  
Ed Lynch



RESIDUALS MANAGEMENT TECHNOLOGY, INC. — CHICAGO

999 PLAZA DRIVE — SUITE 100  
SCHAUMBURG, IL — 60173-5407  
708/995-1500 — 708/995-1900 FAX



GENERAL CONCERNS

**Comment #1:** Throughout the FRPO flammable is used interchangeably with ignitable. The hazardous waste regulations apply to ignitable wastes not flammable wastes. EOG shall change any inappropriate uses of flammable in the FRPO.

**EOG Response #1:** EOG has changed all inappropriate uses of flammable in the FRPO. Attachments 2 through 11 contain the pages of the FRPO have been corrected.

**Comment #2:** EOG should not reference the federal code unless the state has not promulgated comparable regulations. EOG shall change any inappropriate references to the federal code in the FRPO.

**EOG Response #2:** EOG has removed all references to the federal code which the state has promulgated comparable regulations in the FRPO. Attachments 2 through 11 contain the pages of the FRPO have been corrected.

**Comment #3:** EOG shall provide information to answer whether s. 144.44(4R), Wisconsin Statutes, applies to their facility. In order to determine applicability, EOG shall provide adequate information to demonstrate whether or not this statute applies.

**EOG Response #3:** Section 144.44(4r), Wisconsin Statutes refers to noncompliance with plans or orders. This does not apply because EOG is in compliance with the terms of their solid waste permit and interim status permit for hazardous waste storage which were approved by the department. In accordance with ss. 144.443, Wisconsin Statutes, EOG has provided proof of financial responsibility ensuring the availability of funds to comply with the above mentioned plans to the department. EOG has no interest in any other solid or hazardous waste facilities in Wisconsin.

**Comment #4:** EOG shall provide information on the other tenants residing in the Megal Corporation building.

**EOG Response #4:** Tenants currently residing in the Megal Corporation building include:

Design Specialties (Manufacture fireplace doors)  
5609 W. Hemlock Street  
Milwaukee, WI 53223  
(414) 353-4339



ARKO (Dog Training School)  
5605 W. Hemlock Street  
Milwaukee, WI 53223  
(414) 353-4768

**Comment #5:** EOG speaks of exempt recycling activities and reclamation operations in the FRPO. The department would like to see EOG present specific information on each of these processes. EOG should receive concurrence from the department that their recycling activities are exempt activities and not treatment. (attachment 7, section 1, page 5, paragraph 3)

**EOG Response #5:** *The blending tank will be constructed in accordance with the requirements of WAC NR 645. Information on the blending tank will be submitted under a separate submittal. EOG will keep track of all waste codes blended by use of a waste code tally sheet (see Attachment 13 of this submittal) and all blended materials will carry all waste codes which were mixed, stored and transported off site (see EOG Response # 24 for further information on waste code tracking). If non-hazardous materials are blended with hazardous materials, the blended material will be managed as a hazardous material.*

**Comment #6:** If some of the operations at the facility that were thought to be recycling should be actually regulated as treatment, EOG shall update the FRPO to reflect licensed treatment activities. ss. NR 640.06(3), and NR 645.06(3), Wisconsin Administrative Code.

**EOG Response #6:** *All operations proposed at the EOG facility are strictly recycling operations and no treatment operations will occur.*

**Comment #7:** EOG shall provide more specific information on the liquification process at the facility including what is liquified.

**EOG Response #7:** *The "liquification process" refers to the dispersement of viscous materials. For example, a heavy ink will disperse when mixed with a solvent. Viscous materials such as paints, resins and inks will be transferred to one of the fuel blending tanks via a conveyor system. When mixed with the solvent in the tank, the solids will disperse or "liquify".*

**Comment #8:** EOG shall explain what is done with the solvents recovered from the vapor recovery unit.

**EOG Response #8:** *EOG will be fuel blending recovered solvents from the vapor recovery unit. The condensed vapor will be pumped to one of the blended fuel storage tanks.*





*This information is outlined in the original application in Attachment 7, Section 2.3.2, page 12 of the September 1994 submittal.*

**Comment #9:**

Attachment 7, section 2.5, page 14, references drum pumping stations. EOG shall provide more information on these drum pumping stations, including at a minimum where the drum pumping stations would be located throughout the site and a description of the associated piping.

**EOG Response #9:**

*EOG will utilize air motor or explosion-proof electric motor driven drum pumps within the curbed area containing the fuel blending tank to transfer "water-like" low viscosity liquids into the fuel blending tank. The piping will consist of flexible hose attached directly to the drum pump within the containment area. The flexible hose will be connected to schedule 40 steel pipe for the remaining 5-to-10 feet distance to the fuel blending tank. Text has been revised in Attachment 7, Section 2.5, page 14. Attachment 7 of this submittal contains the revised page.*

**Comment #10:**

EOG shall provide more specific information on the blending tank. This information shall include the types of waste that are blended, (hazardous characteristic waste oils, solvents, listed hazardous waste, etc.), what wastes are blended with what other wastes, what wastes are never blended together, and whether the wastes are shipped off site as hazardous wastes. If hazardous wastes are blended in the tank and the wastes from the tank are sent off site as a hazardous waste, the department would apply the same requirements for a hazardous waste storage tank to the blending tank. If this is the case EOG shall show how the blending tank complies with the requirements for a hazardous waste storage tank and submit the same information that would be required for licensing that tank.

**EOG Response #10:**

*The fuel blending tank proposed to be utilized at the facility is intended to blend hazardous characteristic waste oils and solvents as well as hazardous waste solids with a fuel value of 5,000 BTU per pound. This blending will create a pumpable fuel that will contain solids of not greater than 0.25-inch diameter with a pH range within 2 units and 12.5 units. EOG will not blend reactives, PCB's, oxidizers, strong acids or strong bases with the waste fuel mixture. The blended fuel will be transferred to the storage tanks for off-site shipment. The blending tank will be constructed as a hazardous waste storage tank in accordance with the requirements of WAC NR 645. Information on the blending tank will be submitted under a separate submittal.*

**Comment #11:**

Attachment 7, Section 2.3, page 10, paragraph 4, references, "a suitable blended condition." EOG shall provide a clearer explanation of what is "a suitable blended condition."



**EOG Response #11:** *The "suitable blended condition" refers to a mixture of fuel that meets the specifications/requirements of the end user as per their permits and waste analysis plan. EOG has incorporated into the text of Attachment 7, Section 2.2.3, page 10, paragraph 2, the meaning of "a suitable blended condition." The corrected pages which address this issue is contained in Attachment 7 of this submittal.*

**Comment #12:** **EOG shall provide a clearer explanation of the drum auger operation at the site. This information shall at a minimum include; a plan sheet of the auger operation, whether both solid and hazardous waste will be processed in the auger, whether solids from the auger would be treated as a solid or a hazardous waste (attachment 7, section 2.2, page 9), how solids will be transferred from the solids auger (whether the solids will be pumped), and the decision making process used to determine where the solids will be transferred.**

**EOG Response #12:** *Additional text and completed plan sheets showing drum auger operation in greater detail will be submitted by EOG under a separate submittal.*

**Comment #13:** **EOG shall provide more information on containment in all of the loading and unloading areas. This information shall include specifications. EOG shall also explain how dock #2 is designed to contain precipitation. (attachment 7, page 8)**

**EOG Response #13:** *EOG will utilize containment ramps and curbs of concrete with epoxy mortar construction as well as containment trenches. The sentence contained in Attachment 7, Section 2.1.2, page 8, paragraph 1 states "The dock is constructed of concrete, and is designed to contain any precipitation" is incomplete and should read "The dock is constructed of concrete, and is designed to contain any potential spillage inside the building from mixing with any precipitation." This would be accomplished by means of the containment ramp to be constructed at the dock entrance. The containment ramps to be constructed at each dock entrance will be constructed of minimum 5,000 PSIG compressive strength concrete doveled into the existing concrete floor by means of #4 rebar spaced on a minimum 24-inch centers. The concrete will be topped by an epoxy grout mixture with a minimum compressive strength of 6,000 PSIG that can be "feathered" to match the existing concrete and provide a smooth transition for the truck traffic over the ramp. The final surface will be the seamless epoxy floor surfacing material to be applied on and contiguous with the floor of the building. Text has been revised in Attachment 7, Section 2.1.2, page 8. Attachment 7 of this submittal contains the revised page.*



GENERAL REPORT REQUIREMENTS (ch. NR 680, Wisconsin Administrative Code)

**Comment #14:** EOG shall submit plan sheets showing site construction and operation topography. These plans should show how final construction will fit into the existing landscape. This should include cross sections, and construction specifications which show foundations of the facility structures. s. NR 680.05(1)(c)4.f., Wisconsin Administrative Code.

**EOG Response #14:** *Additional text and completed plan sheets showing site construction and operation topography will be submitted by EOG under a separate submittal.*

**Comment #15:** EOG shall submit a signed copy of the proposed Part A application. s. NR 680.06(3)(a), Wisconsin Administrative Code.

**EOG Response #15:** *Attachment 1 of this submittal contains a signed copy of the Part A application.*

**Comment #16:** EOG shall submit a Part A application for the existing facility that contains the even number pages. s. NR 680.06(3)(a), Wisconsin Administrative Code.

**EOG Response #16:** *Attachment 1 of this submittal contains all pages of the Part A application for the existing facility.*

**Comment #17:** EOG shall provide a chemical and physical analysis of the hazardous waste to be handled at the facility. At a minimum, these analyses shall contain all of the information which must be known to store the waste in accordance with chs. NR 600 through 685, Wisconsin Administrative Code. s. NR 680.06(3)(b), Wisconsin Administrative Code.

**EOG Response #17:** *EOG will conduct analysis of six indicator parameters to determine the acceptability of waste materials, compatibility, BTU's/pound, chloride content, water content, pH, and specific gravity.*

**Comment #18:** Attachment 3, appendix E, section 1.1, page 3, refers to the recent extension of RCRA regulations to now include small quantity generators. EOG shall provide a further explanation of what is meant by that statement. s. NR 680.06(6), Wisconsin Administrative Code.

**EOG Response #18:** *Most waste management companies do not have the capabilities to handle small quantities of materials. EOG has specialized in dealing with materials from small quantity generators, we have carved out a "niche" in the industry to manage the 1-5 drum quantities of small quantity generators. The text of Attachment 3, Appendix E, Section 1.1, page 3 has been changed to clarify this statement. Attachment 4 of this submittal contains the revised page.*



**Comment #19:** EOG shall provide Information on any other statutory authority or local, state or federal approvals that apply to the facility. s. NR 680.06(6)(a)2., Wisconsin Administrative Code.

*EOG Response #19: No other statutory authority, local, state or federal approvals apply to EOG.*

**Comment #20:** EOG Shall provide Information on any emissions or discharges associated with preparation and construction of the facility. s. NR 680.06(6)(a)4., Wisconsin Administrative Code.

*EOG Response #20: Emissions related to construction equipment will be controlled as appropriate during preparation and construction activities. EOG will also set up temporary silt fences to prevent sediment runoff during preparation and construction of the facility. EOG has incorporated this text into Attachment 3, Appendix E, Section 2.4. These replacement pages are contained in Attachment 4 of this submittal.*

**Comment #21:** I could not find Information on other anticipate changes with facility development. The checklist points out that the Information should be in attachment 3, appendix D, section 6. Even assuming appendix E, (see condition #95), I could not locate the Information. EOG shall provide such information or point out where such information is located in the FRPO. s. NR 680.06(6)(a)5., Wisconsin Administrative Code.

*EOG Response #21: No other changes associated with the facilities operations are anticipated other than those stated in this application. EOG has incorporated this text into Attachment 3, Appendix E, Section 2.5. These replacement pages are contained in Attachment 4 of this submittal.*

**Comment #22:** Attachment 2, section 3, page 2, states, "No other permitted facilities in geographic proximity to EOG would offer the diversity of hazardous waste recycling nor the distribution of service." EOG shall explain what they consider to be in the geographic proximity to EOG. EOG shall also explain in more detail their, "diversity of hazardous waste recycling," and their, "distribution of service." In attachment 2, section 5, page 2, EOG states that their, "service area extends throughout the United States." EOG shall discuss in further detail a breakdown of their service area and how their other branch offices work with the Milwaukee facility. s. NR 680.06(8), Wisconsin Administrative Code.

*EOG Response #22: EOG is a full service waste consulting firm located in Milwaukee, Wisconsin with branch offices in Westmont, Illinois, Minneapolis, Minnesota, Salt Lake City, Utah and College Station, Texas. The Milwaukee facility is EOG's only processing facility. Each of these offices has an Account Manager that is responsible for sales within that specific region. These sales offices will be*





*directing drums from their clients to EOG's Milwaukee facility for processing. EOG has added text to Attachment 2, Section 3, page 2 to clarify this issue. Attachment 2 of this submittal contain the revised page.*

**WASTE ANALYSIS PLAN** (ss. NR 680.06(3)(c), AND nr 630.13(1) Wisconsin Administrative Code)

**Comment #23:** EOG shall explain the criteria for blending of wastes. EOG shall also explain what will be done to ensure that only compatible wastes are blended. EOG shall present a clearer more concrete description of how Incompatible wastes and reactive wastes are determined and separated.

*EOG Response #23: To ensure that only compatible wastes are processed and blended, a composite sample of each inbound waste stream to the EOG facility will be subject to compatibility testing (see Attachment 15 of this submittal). If the material is compatible, it will be deemed acceptable for waste-derived-fuel production. If a waste stream material is deemed incompatible, it will not be processed or blended into a waste-derived-fuel.*

**Comment #24:** Much of hazardous wastes shipped today can have multiple waste codes. EOG shall explain how wastes received at their site with multiple waste codes will be processed through their system and whether they anticipate any problems will occur. EOG shall explain if any waste codes will be lost through the consolidation or processing of the waste.

*EOG Response #24 All materials accepted by EOG will be accompanied by a manifest that will have waste codes listed in sections I and J. These waste codes will be transferred onto a tally sheet (see Attachment 12 of this submittal) as the materials are blended. These tally sheets will accompany outgoing manifests. Waste codes are also listed on the "EOG BULK MATERIALS INVENTORY REPORT" located in Attachment 6, Appendix C. The tally sheets and Bulk Materials Inventory report will be filled out manually and the data will then be entered into our computerized inventory control system. This will enable us to track waste codes for all incoming and outgoing waste streams. No waste codes will be lost in the blending of waste streams and waste codes will be carried through all the way to the end-sites.*

**Comment #25:** EOG shall explain who fills out a waste profile sheet and whether the form is always completely filled out.

*EOG Response #25: Waste profile sheets are to be filled out by the generator or broker. Waste Profile forms accepted by EOG will include EOG's Waste Profile Sheet (WPS), the generators waste identification form, or one of the waste identification forms used by brokers who represent the generator. The Waste Profile form is always completed; however, if some areas of the form are incomplete when submitted,*



*EOG will contact the generator and/or broker to gather the information necessary to fully complete the form. EOG has added text to Attachment 5, Section 2, page 2 to clarify this issue. Attachment 5 of this submittal contain the revised pages.*

**Comment #26:** EOG shall explain what are the minimum requirements that are required on a generator's or broker's waste Identification form.

*EOG Response #26: The waste identification form will at a minimum contain Generator Information, Waste Description, General Characteristics, RCRA Information, Viscosity, Total Suspended Solids, pH, BTU's, Flash Point, Halogens, Hazardous Characteristics and Other Components, Chemical Composition and Metals information. EOG has added text to Attachment 5, Section 2, page 2 to clarify this issue. Attachment 5 of this submittal contain the revised pages.*

**Comment #27:** EOG explains that, "pre-qualification samples are periodically requested for verification and generators shall be requested to periodically resubmit waste identification forms." EOG shall explain what is meant by "periodically." The department would like to see a consistent system in place.

*EOG Response #27: Annual recertification of each active waste stream by each generator will be required to document any changes in the nature of the waste. This will encompass completion of a Waste Profile Sheet and a sample if changes to the waste stream or process generating the waste stream are apparent.*

**Comment #28:** EOG's use of the descriptor with the table of the list of wastes to be managed on site looks good. The department would like to see EOG add an additional descriptor which would be whether the waste will be sent offsite for use as a secondary fuel.

*EOG Response #28: A descriptor which indicates which materials will be sent off site for use as a secondary fuel has been added to Attachment 5, page 35 and the contents of this table have been updated. Attachment 5 of this submittal contains Table 1 with the new descriptor added.*

**Comment #29:** EOG shall clearly define what is involved in the precertification process. (attachment 3, section 4, page 31)

*EOG Response #29: Attachment 5, Section 4, page 36, the first sentence has been changed to read as follows: "Generally, any material that has been approved through the pre-qualification process, consisting of Waste Profile evaluation and sample analysis if required, is initially acceptable." Attachment 5 of this submittal contains the revised page for this issue.*



**Comment #30:** Attachment 3, section 4, page 31, mentions that, "the materials may be analyzed for the following parameters in an onsite laboratory to determine their acceptability based on the schedule presented in Section 8, Analysis Plan." EOG shall explain whether materials will always be analyzed based on the schedule.

**EOG Response #30:** EOG will analyze for all the parameters listed in Attachment 5, Section 4, page 36 in an on-site laboratory to determine the acceptability based on the schedule presented in Attachment 5, Section 8. Attachment 5 of this submittal contains the revised page.

**Comment #31:** Attachment 3, section 7.3, page 37, mentions, "sampling bulk load solids may be done by taking random samples throughout the load." EOG shall explain whether bulk load solids will always be sampled.

**EOG Response #31:** EOG will sample bulk solid loads by taking samples throughout the load to make a representative composite sample. Attachment 5 of this submittal contains the revised page.

**Comment #32:** Attachment 3, section 5.1, page 32, talks about the receipt of containerized loads. EOG shall rewrite this section so that it is clear what tests are done, when and where the tests are done, and on what wastes the tests are done. The department needs to know how often the waste is sampled.

**EOG Response #32:** Containers from each generators waste stream(s) shall also be randomly chosen for analysis and inspection. A minimum of ten percent of the containers of each generators waste stream(s) shall be sampled and analyzed for compatibility, BTU/pound, chloride, water, specific gravity and pH in the on-site laboratory. This same analysis shall be performed for bulk loads. All incoming wastes are sampled. Attachment 5 of this submittal contains the revised pages.

**Comment #33:** Attachment 3, section 5.1, page 32, mentions that, "containers shall also be randomly chosen for analysis and inspection." EOG shall explain more clearly how this choosing of containers is done.

**EOG Response #33:** A minimum of ten percent of each generator's waste stream(s) shall be sampled and analyzed in the on-site laboratory. Attachment 5 of this submittal contains the revised pages.

**Comment #34:** Attachment 8, Spill Prevention Control and Countermeasures Plan, figure 1, Flow Diagram, page 18, contains a very well done and useful flow chart. The department feels it would be a benefit to also include this flow chart in the waste analysis plan and add the analysis done at each stage for waste



received from offsite and include the type of analysis.

EOG Response #34: *An updated flow diagram has been prepared to include the analysis done at each stage for waste received from off site as well as the type of analysis performed. This flow chart has been added to the Waste Analysis Plan of the permit application. Attachment 5, Appendix C of this submittal contains the updated flow diagram.*

Comment #35: **Attachment 3, section 5.2 and section 5.3, page 33, both mention, "and any other analysis as deemed necessary by management." EOG shall discuss what other analyses would be performed and when would they be deemed necessary.**

EOG Response #35: *Additional analysis may be necessary on suspect materials to verify that the parameters of the shipped waste reasonably match the parameters provided on the Waste Profile Sheet (WPS) for that waste. Examples of suspected materials and tests performed for verification include the following:*

- *Reactive testing on methacrylates*
- *Odor or viscosity to verify with the WPS*
- *Additional analysis may be necessary such as ash content for end-site disposal approval.*

Comment #36: **EOG shall explain if any analysis is performed on lab packs. EOG shall also explain whether the contents of the lab packs will be emptied and combined with like materials. If EOG plans to combine the contents of the lab packs, the department feels that some type of compatibility testing will need to be performed. (attachment 3, section 5.4, page 34)**

EOG Response #36: *The contents of the lab packs will be de-packed. The lab packs will then undergo one of the following:*

- *consolidated and blended to produce a waste-derived fuel,*
- *repacked with other compatible chemicals, or;*
- *consolidated into the acid or basic storage tanks.*

*Lab packs not suitable for consolidation will be repacked with compatible chemicals. All other lab packs will undergo testing for compatibility once they have been depacked. For lab packs consolidated for fuel blending, the same six parameters identified in EOG Response #30 will be analyzed per composite waste stream.*





**Comment #37:** After EOG signs off on the manifest, they are unable to send the waste back to the generator unless the generator is a licensed facility able to receive waste from offsite. EOG shall include a statement in the waste analysis plan that reflects this issue. (attachment 3, section 6, page 35)

**EOG Response #37:** *If a full load of material is rejected, the manifest will not be signed by EOG. If a partial load of containerized material is rejected, the containers will be noted in section 19 of the manifest and then the manifest will be signed by EOG to certify receipt of non-rejected containers. Text has been inserted in Attachment 5, Section 6, page 40 to clarify this issue. Attachment 5 of this submittal contains the revised page.*

**Comment #38:** EOG shall explain how they could reject only a part of a bulk load. (attachment 3, section 6.2, page 5)

**EOG Response #38:** *EOG expects that bulk waste may be delivered in compartmentalized trailers. In this case EOG can reject a part of a bulk load. Text has been added to Attachment 5, Section 6.2, page 5 to clarify this issue. Attachment 5 of this submittal contains the revised page.*

**Comment # 39:** Attachment 3, section 6.4, page 36, concerns the rejection procedures for polychlorinated biphenyl loads. If PCB's are received at the site in units other than lab packs, EOG shall change the wording to reflect the use of other units.

**EOG Response #39:** *EOG has changed the wording of Attachment 5, Section 6.4, page 41, sentence 1 to reflect PCB's being received at the site in units (i.e., capacitors, ballasts, etc.) other than lab packs. Attachment 5 of this submittal contains the revised page.*

**Comment #40:** EOG shall explain what products are produced at the facility. (attachment 3, section 11, page 61)

**EOG Response #40** *Products produced at the EOG facility will consist of "usable fuel products". EOG has changed the wording in Attachment 5, Section 11, page 66 to better describe the products produced at EOG's facility. Attachment 5 of this submittal contains the revised page.*

**Comment #41:** In attachment 3, table 2, pages 39 through 58, EOG shall list what are each of the "other" tests.

**EOG Response #41:** *EOG has revised Table 2 of Attachment 5 to include the analysis performed for all wastes having waste codes received at EOG. Attachment 5 of this submittal contains the revised Table 2.*



**Comment #42:** EOG shall explain whether the analyses listed in attachment 3, table 2, pages 39 through 58 are the only analyses performed on the waste and when these analyses would be performed on the waste.

**EOG Response #42:** *The analysis listed on revised Table 2 of Attachment 5 will be completed on each waste stream when it arrives at the EOG facility.*

**Comment #43:** EOG shall explain who will be performing the waste analysis.

**EOG Response #43:** *Once samples are collected and labeled, they will be brought to the on-site laboratory for analysis which will be completed by the Laboratory Chemist. Attachment 5, Section 7.1, page 42 has been changed to clarify this issue. Attachment 5 of this submittal contains the revised page.*

**Comment #44:** EOG shall state that the chemical and physical samples will be analyzed by a laboratory certified or registered under ch. NR 149, Wisconsin Administrative Code, as required by ss. NR 630.13(2) and (4), Wisconsin Administrative Code.

**EOG Response #44:** *Chemical and physical samples will be analyzed for waste characterization by a laboratory certified or registered under ch. 149, Wisconsin Administrative Code. Section 4 of Attachment 5 contains the revised page.*

**CONTAINER REQUIREMENTS** (ch. NR 640, Wisconsin Administrative Code. Tank Requirements, (ch. NR 645, Wisconsin Administrative Code), included if they also apply)

**Comment #45:** The FRPO mentions "these drawings" in attachment 7, section 2.4, page 13, paragraph 4. EOG shall provide more specific information on what "these drawings" are and where they are located.

**EOG Response #45:** *Attachment 7, Section 2.4, page 13, text has been revised to indicate that Sheets 9, 10 and 11 of Attachment 15 depict the typical locations of containers within the storage/process building for storage of up to 2,272 containers, however, the number of containers in any of these areas may vary. Attachment 7 of this submittal contains the revised page.*

**Comment #46:** I understand EOG is located on two separately owned properties. EOG shall clearly explain the division of the two properties, clearly identify the two property owners, explain how this division of the two properties will be handled for the operation of this site, and explain what problems would be anticipated in having two separate property owners and how those problems would be addressed. EOG shall explain how the second property owner will be kept informed of activities going on at the site. ss. NR 640.06(1)(a)2., and 645.06(1)(a)2., Wisconsin Administrative Code.



EOG Response #46: EOG has added the new lease agreement between EOG and Megal Development Corp as Appendix F to Attachment 3. EOG has purchased the property and has entered a lease agreement with Megal Development Corp. for office space adjacent to the property. Attachment 16 of this submittal contains the lease agreement.

Comment #47: EOG shall include in the FRPO whether any parks, hospitals, or nursing homes are within a 1/2 mile radius of the facility. s. NR 640.06(1)(a)3., Wisconsin Administrative Code.

EOG Response #47: No nursing homes or hospitals are located within a 1/2 mile radius of the EOG facility. There are two country clubs; to the west, approximately 810 feet from the EOG facility is Brynwood Country Club and to the east, approximately 1350 feet from the EOG facility is Tripoli Golf Club no other parks or recreational areas are known to exist within a 1/2 mile radius of the EOG facility. Sheet 6 of 18 of the September 1994 FRPO submittal shows the location of these country clubs in relation to the EOG facility. Text has been added to Attachment 3, Section 2.2, to satisfy WAC NR 640.06(1)(a)3. Attachment 3 of this submittal contains the revised pages.

Comment #48: EOG lists facilities from all over the country from which they would be accepting waste. EOG shall explain whether these wastes would be going to the Milwaukee site or one of their other sites. ss. NR 640.06(1)(a)4., and NR 645.06(1)(a)4., Wisconsin Administrative Code.

EOG Response #48: As noted in EOG Response #22, EOG is a full service waste consulting firm located in Milwaukee, Wisconsin with branch offices in Westmont, Illinois, Minneapolis, Minnesota, Salt Lake City, Utah and College Station, Texas. The Milwaukee facility is EOG's only processing facility. Each of these offices has an Account Manager that is responsible for sales within that specific region. These sales offices will be directing drums from their clients to EOG's Milwaukee facility for processing. EOG has added text to Attachment 2, Section 3, page 2 to clarify this issue. Attachment 2 of this submittal contains the revised page.

Comment #49: EOG shall provide a response to the material balance informational request of ss. NR 640.06(1)(a)5. and 7., and NR 645.06(1)(a)5. and 7., Wisconsin Administrative Code, or explain where this information is located in the FRPO. I could not locate this information in attachment 3, section 7.

EOG Response #49: No wastes will be generated at EOG's facility. Waste accepted at EOG's facility will be bulked and/or blended for use in secondary markets (i.e., cement kilns) Examples of material balance at this facility are as follows:



Scenario 1

EOG receives a lab pack containing the following chemicals:

Sulfuric Acid	1 pint	D002
Phosphoric Acid	1/2 gallon	D002
Hydrochloric Acid	1 quart	D002
Nitric Acid Solution 40 %	1 quart	D002
Chromic Acid Solution	4 oz.	D002, D007
Hydrofluoric Acid	1 pint	D002

All of these items will be depacked and consolidated into the acid tank. Any items that are received in a lab pack that could not be bulked would be repacked and sent to an off-site disposal facility for disposal. The containers would be triple rinsed with the rinse water going into the acid tank. The glass jars would then be crushed and sent to a glass reclaimer.

Scenario 2

EOG receives 55-gallon drums of acetone from an industrial client which carries the EPA waste codes D001 and F003. These drums are pumped into one of the bulk fuel tanks. When the materials from this tank ships off-site, the manifest will carry the D001 and F003 codes as well as any other codes from material bulked into this tank. The RCRA empty drums will be sent off-site to a drum reclaimer.

Scenario 3

EOG receives a lab pack containing the following chemicals:

Acetone	1 pint	D001, F003
Hexane	1 quart	D001, F005
Toluene	1 pint	D001, F005
Allyl Alcohol	2x1 pint	D001, P005
Hexachlorobenzene	1/2 pound	U127, D032
Methylene Chloride	1 quart	F002
Phenol	1 pound	U188
Methyl Ethyl Ketone	1/2 gallon	D001, F005, D035
Methanol	2x1 quart	D001, F003
Pyridine	1 pint	D001, F003, D038

All of these items will be depacked and consolidated for fuel. All of the waste codes will be retained through the bulking process. When the materials ship off-site, the manifest will carry all waste codes. The containers would be triple rinsed with the rinse water going into the fuel. The glass jars would then be crushed and sent to a glass reclaimer. Attachment 3, Section 7.1 contains the revised page(s).





**Comment #50:** 17. The area north of the Megal Corporation building is where traffic will enter the site and access to the site will be controlled. EOG shall provide a clearer description of the area north of the Megal Corporation building. ss. NR 640.06(1)(a)6., NR 640.06(1)(c)6., NR 645.06(1)(a)6., and NR 645.06(1)(c)6., Wisconsin Administrative Code. EOG shall also explain where trucks will be parked when they are waiting to enter the EOG property while multiple loads are being delivered to EOG. ss. NR 640.06(1)(h)4., and NR 645.06(1)(h)4., Wisconsin Administrative Code.

**EOG Response #50:** *For the expanded facility, waste delivery trucks enter the facility through the main gate located north (rear) of the leased office space. The area north of the lease office space is a paved roadway and parking area. This parking lot area is rarely used by the tenants of the building because sufficient parking space is available in the front of the building. Trucks waiting to enter the facility while multiple loads are being delivered, will park along the northern boundary of the paved roadway. Text has been added to Attachment 3, Section 5. Attachment 3 of this submittal contains the revised page.*

**Comment #51:** EOG shall identify the persons or person responsible for plant construction. ss. NR 640.06(1)(a)8., and NR 645.06(1)(a)8., Wisconsin Administrative Code.

**EOG Response #51:** *Henry Krier of EOG will be the primary person responsible for site construction. Megal Corporation will also be involved with the site construction activities. Text has been added to Attachment 3, Section 8 to clarify this issue. Attachment 3 of this submittal contains the revised page.*

**Comment #52:** EOG shall explain whether an air management permit will be needed for the site. EOG shall present more specific information on air emissions than what is in attachment 3, Section 10.1. ss. NR 640.06(1)(a)9., and NR 645.06(1)(a)9., Wisconsin Administrative Code.

**EOG Response #52:** *Text has been added to Section 10.1 of Attachment 3. EOG requires a construction air permit and an operating air permit for the site. The construction air permit as a new, non part 70 source (minor source) has been prepared. The construction permit has been submitted to the Wisconsin Department of Natural Resources, and copies have been forwarded to you for your use as Exhibit 1 of this submittal.*

**Comment #53:** EOG shall provide further information on the facility layout including building and structures foundation, sizing of receiving areas, sizing of major processes and processing equipment. ss. NR 640.06(1)(a)12., and NR 645.06(1)(a)12., Wisconsin Administrative Code.

**EOG Response #53:** *Additional text and completed plan sheets of building and structures*



*foundations, sizing of receiving areas, sizing of major processes and process equipment in greater detail will be submitted by EOG under a separate submittal.*

**Comment #54:**

EOG shall explain the timing of the construction of the new site. EOG explains that the facility will be constructed in a phased approach. The department would like the specifics of the plan because the phased construction might affect the coordination of the licensing at the facility. EOG shall provide a time table for start up and operation of the various units at the site. ss. NR 640.06(1)(a)13., and NR 645.13(1)(a)13., Wisconsin Administrative Code.

*EOG Response #54: EOG will complete their facility construction in the following phases:*

*Phase I: Retrofit the existing building at 5611 West Hemlock Street to meet permit requirements for storage of hazardous wastes.*

*Phase II: Construction of the Lab Pack Depack building.*

*Phase III: Construction of the tank farm.*

*All necessary security and safety issues associated with each Phase will be self contained. For example, the facility fence and security system will be constructed during Phase I. The facility construction Phases have been added to Attachment 3, Section 8. Attachment 3 of this submittal contains the revised pages.*

**Comment #55:**

EOG shall explain what provisions will be taken during the construction of the facility to ensure protection of groundwater and surface waters. ss. NR 640.06(1)(a)15., and NR 645.06(1)(a)15., Wisconsin Administrative Code.

*EOG Response #55: Additional text and completed plan sheets explaining the provisions that will be taken during construction will be submitted by EOG under a separate submittal.*

**Comment #56:**

In addition to identifying the surrounding businesses, EOG shall identify the surrounding property owners., ss. NR 640.06(1)(b)7., and NR 645.06(1)(b)7., Wisconsin Administrative Code.

*EOG Response #56: The surrounding property owners consist of the following:*

- 5606 W. Hemlock Street (north)  
Megal Development Corp.  
P.O. Box 18661  
Milwaukee, WI 53218*



- 5601 W. Hemlock Street (northeast)  
Megal Development Corp.  
12650 Lisbon Road  
Brookfield, WI 53005
- 5400 W. Good Hope Road (east and southeast)  
Aid Association for Lutherans  
5400 W. Good Hope Road  
Milwaukee, WI 53223
- 5621 W. Hemlock Street (west)  
Centercom Wisconsin, Inc.  
5737 W. Hemlock Street  
Milwaukee, WI 53223
- 5600 W. Good Hope Road (south)  
PCA Box Company  
P.O. Box 672346  
Houston, TX 77267

*This information has been incorporated into the text of Attachment 3, Section 2.2. Attachment 3 of this submittal contains the revised page(s).*

**Comment #57:** A site conditions map indicating surface waters, wetlands and intermittent streams is not shown in attachment 15, sheet 7 of 18, as listed in the location comments. EOG shall provide a site conditions map showing surface waters, wetlands and intermittent streams. ss. NR 640.06(1)(c)2., and NR 645.06(1)(c)2., Wisconsin Administrative Code.

**EOG Response #57:** Attachment 15, sheet 7 of 18, is titled "Floodplain Map". This map has surface waters, wetlands and intermittent streams shown with a scale of 1" = 200' and a 2-foot contour interval. To more clearly show the above features, EOG has darkened these features on this drawing. A revised Sheet 7 of 18 is contained in Attachment 17 of this submittal.

**Comment #58:** Runoff control systems, and storm, sanitary and process sewerage systems are not presented on the site conditions map in attachment 15, sheet 3 of 18 as listed in the location comments. EOG shall provide a description of runoff control for the site and a description of the sanitary and storm sewers on the site. EOG provides the existing storm sewers in attachment 15, sheet 2 of 18, but EOG should also provide any proposed storm sewers or changes. EOG shall also present the drainage patterns for the site. ss. NR 640.06(1)(c)10., and NR 645.06(1)(c)12., Wisconsin Administrative Code.



**EOG Response #58:** *Additional text and completed plan sheets describing runoff control systems, storm, sanitary and process sewerage systems for the site will be submitted by EOG under a separate submittal.*

**Comment #59:** The site conditions map in attachment 15, sheet 3 of 18, does not show any barriers for drainage. EOG shall provide a site conditions map that shows any barriers to drainage on the site, ss. NR 640.06(1)(c)11., and NR 645.06(1)(c)13., Wisconsin Administrative Code.

**EOG Response #59:** *Additional text and completed plan sheets describing barriers for drainage for the site will be submitted by EOG under a separate submittal*

**Comment #60:** EOG shall provide more detailed construction drawings for the whole site. I would like specifications on the following items:

- a. the container auger
- b. drum emptying under a nitrogen blanket
- c. the containment areas and the process/storage building (specifically the areas around the doorways)
- d. the blending tank and associated equipment
- e. tank foundations
- f. tank design specifications
- g. the associated piping at the site and the pipe joints

ss. NR 640.06(1)(d), and NR 645.06(1)(d), Wisconsin Administrative Code.

**EOG Response #60:** *Additional text and completed plan sheets providing more detailed construction specifications and design qualities for the site will be submitted by EOG under a separate submittal. This submittal will satisfy ss. NR 640.06(1)(d), and NR 645.06(1)(d), Wisconsin Administrative Code and include specifications for the following:*

- the container auger
- drum emptying under a nitrogen blanket
- the containment areas and process/storage building (specifically the areas around the doorways)
- the blending tank and associated equipment
- tank foundations
- tank design specifications
- the associated piping at the site and the pipe joints

**Comment #61:** EOG shall provide an engineering plan that shows final site topography. EOG shall also show whether the final grade for the site will affect the proposed boundary fence, and if any fill will be added to build up the northeast corner of the site. ss. NR 640.06(1)(d)4., NR 640.06(1)(g)2.,





645.06(1)(d)3., and NR 645.06(1)(g)2., Wisconsin Administrative Code.

**EOG Response #61:** EOG will provide an engineering plan that shows final site topography under a separate submittal. At this time, EOG anticipates that the final grade of the site will not affect the proposed boundary fence, and the northeast corner of the site will not need to be built up. This submittal will satisfy ss. NR 640.06(1)(d)4., NR 640.06(1)(g)2. NR 645.06(1)(d)3. and NR 645.06(1)(g)2., Wisconsin Administrative Code.

**Comment #62:** EOG shall provide any recommendations on design constraints for development of the site considering all available data and give reasons for the recommendations. I could not find this information in attachment 7 as indicated in the location comments. ss. NR 640.06(1)(f), and NR 645.06(1)(f), Wisconsin Administrative Code.

**EOG Response #62:** EOG decided to build this facility at this location because they could use their existing building which is located in an existing industrial park with major transportation routes (I45 and I43) nearby. EOG is located at the end of a cul du sac which secludes the facility from passing traffic. The site is zoned Heavy Industrial, therefore rezoning is not required. Milwaukee is the largest city and industrial center of Wisconsin. The greatest portion of targeted wastes within Wisconsin are generated in the Milwaukee area. Additionally, most of the end sites to which the fuel will be shipped are located east and south of Wisconsin (Illinois, Missouri, Michigan, etc.). Therefore, a southeastern Wisconsin location provides the best transportation logistics for this operation.

**Comment #63:** EOG shall provide a plan sheet showing any surface water control structures. ss. NR 640.06(1)(h)2., and 645.06(1)(h)2., Wisconsin Administrative Code.

**EOG Response #63:** EOG will provide a plan sheet showing any surface water control structures in accordance with ss. NR 640.06(1)(h)2. and NR 645.06(1)(h)2., Wisconsin Administrative Code. This information will be submitted to the department under a separate submittal.

**Comment #64:** EOG shall clearly show any slope to the floor in each of the storage areas and also show how the slope would affect the containment capacity. ss. NR 640.06(2)(a)1. and 2., NR 640.13, NR 645.06(2)(a)1. and 2., and NR 645.09, Wisconsin Administrative Code.

**EOG Response #64:** EOG will clearly show any slope to the floor in each of the storage areas and also show how the slope would affect the containment capacity in accordance with ss. NR 640.06(2)(a)1. and 2., NR 640.13, NR 645.06(2)(a)1. and 2., and NR 645.09, Wisconsin Administrative Code. This information will be submitted to the department under a separate submittal.



**Comment #65:** EOG shall explain what the containers will be stored on in the rooms in the lab pack building. ss. NR 640.06(2)(a), and NR 640.13, Wisconsin Administrative Code.

**EOG Response #65:** *The floors in the rooms of the lab pack building will be continuously sealed with a concrete base and will have no floor drains. The doorway of each of the five rooms will have a 6-inch impervious concrete ramp. The containment capacity of each room will be greater than 200-gallons which is greater than the largest container which will be processed in these rooms. Attachment 8, Appendix A of this submittal contains the containment calculations for these rooms. Attachment 8, Section 9.2 has been revised and the revisions are contained in Attachment 8 of this submittal.*

*Drums will be transported, via a drum dolly, from the lab pack containment area to the appropriate room for depacking or pumping. Once the drum has been emptied, it will be removed from the room.*

**Comment #66:** Because the containment area for the container storage area and the blending tank are in a common use area, EOG shall explain what restrictions will be placed on the amount and type of materials that will be stored there. ss. NR 640.06(2)(a), and NR 640.13, Wisconsin Administrative Code.

**EOG Response #66:** *Only compatible wastes are stored in the process/storage building and only compatible materials will be blended in the blending tank. Restrictions of the amount of materials that can be stored in this area are dictated by the storage capacity and layout as described in Attachment 7, Section 2.4 and Sheets 9 and 10 in Attachment 15.*

**Comment #67:** Attachment 8, section 9.1, page 12, paragraph 5, states, "in the event of a leakage or rupture...waste it may contain will be removed ... If the quantity contained in the faulty equipment merits removal." EOG shall explain what is meant by, "if the quantity contained merits removal." ss. NR 640.06(2)(a)5., NR 640.13, NR 645.06(2)(a)5., and NR 645.09, Wisconsin Administrative Code.

**EOG Response #67:** *EOG has revised Attachment 8, Section 9.1, page 12, paragraph 5 as follows: "In the event of leakage or rupture, the faulty equipment should easily be identified by visual inspection as part of the daily inspection schedule. Once identified, the faulty equipment will be immediately taken out of service, and any wastes (or product) it may contain will be removed and directed into containers or available tank space on-site. Attachment 8 of this submittal contain the revised pages.*



**Comment #68:** Attachment 8, section 9.2, page 13, paragraph 2, refers to the storage/process building having a 6 inch concrete curbing at entrances to the building. The curbing in this building is not all concrete or impervious and as a condition for final licensing, EOG shall make all of the curbing concrete and impervious. s. NR 640.13, Wisconsin Administrative Code.

**EOG Response #68:** *EOG will replace any permeable curbing with impervious concrete curbing prior to final licensing.*

**Comment #69:** EOG shall explain what is done to ensure compliance with the requirements for management of ignitable and reactive wastes when blending wastes. NR 630.17, Wisconsin Administrative Code. EOG shall mention what is specifically done to determine if wastes are potentially incompatible. EOG shall also mention how incompatible wastes are kept separate or protected from other wastes. ss. NR 630.17, NR 640.10, and 640.15(2), referenced from 640.06(2)(b) and (c), and ss. NR 645.13 and 645.14, referenced from NR 645.06(2)(b) and (c), Wisconsin Administrative Code.

**EOG Response #69:** *To prevent sources of external ignition, explosion proof electrical equipment will be used in all ignitable liquids storage and process areas. Precautions taken in the container storage area to prevent accidental fire and explosion include the proper storage of containers (stacking, aisle space, labeling and sealing of containers), dikes and warning signs. Smoking is prohibited.*

*Containers holding ignitable waste are stored 50 feet from the property line as shown on Sheets 9 and 10 in Attachment 15.*

*Open flames are prohibited in areas where ignitable wastes are handled.*

**Comment #70:** Flammable wastes are mentioned as being located at least 50 feet from the facility's property line but nothing is mentioned about the location of reactive wastes. EOG shall explain how they will comply with the buffer zone requirements for reactive wastes. ss. NR 640.06(2)(c), and NR 640.14, Wisconsin Administrative Code.

**EOG Response #70:** *Containers holding reactive and incompatible wastes are stored and handled in the lab pack building only. As shown on Sheet 2 of 18 (Attachment 15) the entire lab pack building is located 50 feet from the facility line.*

**Comment #71:** EOG shall provide more information to show how the facility will be in compliance with the requirements for incompatible wastes. ss. NR 640.06(2)(c), and 640.15(1), Wisconsin Administrative Code.

**EOG Response #71:** *All containers are compatible to the material stored in them. Incompatible*



*materials are separated and stored in designated areas within the lab pack building. No incompatible materials will be fuel blended.*

**Comment #72:** EOG shall provide more extensive information in the operations and maintenance manual on specifications for site construction and operation and descriptions of daily operations. ss. NR 640.06(2)(d), and NR 645.06(2)(d), Wisconsin Administrative Code.

**EOG Response #72:** *The operations and maintenance manual is entitled "Process Information" and is contained in Attachment 7 of the September 1994 submittal.*

*The main office for EOG will be relocated (across the street) within three months. Prior to Phase I of construction, EOG will have bulked any existing materials and shipped them off-site. During construction, operations will cease until construction of phase I is completed. During Phase II and Phase III construction, operations will exist only within the completed Phase I building and the northern shipping dock will be the only dock in use for incoming and outgoing materials.*

**Comment #73:** EOG shall provide an example of daily operating records. ss. NR 640.06(2)(d), and NR 645.06(2)(d), Wisconsin Administrative Code.

**EOG Response #73:** *Daily operating records are listed as "EOG TANK FARM INVENTORY REPORT" and "EOG TANK FARM REPORT, Outbound Comparisons" in Attachment 6, Appendix D of the September 1994 submittal.*

**Comment #74:** EOG shall explain how precipitation runoff will be managed at the site. ss. NR 640.06(2)(d)3., and NR 645.06(2)(d)3., Wisconsin Administrative Code.

**EOG Response #74:** *Precipitation collected from within containment areas will be handled as contaminated and tested for compatibility prior to reblending into fuel. Precipitation outside of containment areas will be allowed to drain via overland flow into the sewer system. Attachment 8, Section 9.3 of the September 1994 submittal describes EOG's procedures for precipitation runoff.*

**Comment #75:** EOG shall provide in the closure plan a description of possible land uses after closure. I could not locate this information in attachment 11, section 12, as indicated in the location comments. ss. NR 640.06(2)(e)2., 640.16, NR 645.06(2)(e)2b., NR 645.17, and 685.05, Wisconsin Administrative Code.

**EOG Response #75:** *After all decontamination has been completed and site closure has been completed, the buildings and property may be used for other commercial or industrial business. Text has been added to Attachment 11, Section 11 to clarify this issue. Attachment 11 of this submittal contains the revised page(s).*





**Comment #76:** Attachment 11, page 16, table 3, shows a discrepancy in the number of samples for the bulk solids storage container management area between the number of samples column and the description column. EOG shall resolve this issue and show consistency. ss. NR 640.06(2)(e)2., NR 640.16, NR 645.06(2)(e)2., 645.17, and NR 685.05, Wisconsin Administrative Code.

**EOG Response #76:** EOG has corrected this typographical error. A revised Table 3 has been provided in Attachment 11 of this submittal.

**Comment #77:** EOG shall provide the anticipated time before closing and any anticipated partial closures. ss. NR 640.06(2)(e)2., NR 640.16, NR 645.06(2)(e)2., NR 645.17, and NR 685.05, Wisconsin Administrative Code.

**EOG Response #77:** EOG has indefinite life because it is a recycling facility. It has an expected life of 50 years. The entire facility will operate until closure. Therefore, no partial closure is anticipated. Text has been added to Attachment 11, Section 8 to clarify this issue. Attachment 11 of this submittal contains the revised page(s).

**Comment #78:** In your comment on location of Information for ss. NR 640.06(2)(e)3., and NR 645.06(2)(e)3., Wisconsin Administrative Code, EOG shall explain where is appendix B.

**EOG Response #78:** EOG has corrected this typographical error. Appendix B should read Attachment 12. The Checklist has been corrected and a revised checklist is contained in Attachment 14 of this submittal.

**Comment #79:** For the contingency plan to stand on its own as an independent document, EOG should include the following information in the plan or reference where the information can be found in the plan.

- a. Information on the communication systems and their locations,
- b. the location of safety equipment and emergency equipment in a layout of the whole facility, and
- c. a listing of the types of wastes, their hazards and where they are stored.

ss. NR 640.06(2)(f), NR 645.06(2)(f), NR 630.21, and NR 630.22(1) and (2), Wisconsin Administrative Code.

**EOG Response #79:** EOG has added text to Attachment 9, Sections 1.1, 5 and 6.1 to reference this information. Attachment 9 of this submittal contains the revised page(s).

**Comment #80:** Attachment 8 addresses equipment failure and power outage. EOG shall also include in the plan whether any backup equipment is kept on site. ss.



NR 640.06(2)(f), and NR 630.21, Wisconsin Administrative Code.

EOG Response #80: *As indicated in Attachment 8, Section 8.3 of the September 1994 submittal, EOG will have an auxiliary power source (i.e., generator) to be utilized in case of a power outage.*

Comment #81: **EOG shall provide a clearer discussion on how the aisle space requirements of s. NR 640.08, Wisconsin Administrative Code will be met.**

EOG Response #81: *Adequate aisle space will be maintained to allow for the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of the facility operation in an emergency.*

*Adequate aisle space will be maintained to allow for the unobstructed movement of personnel conducting inspections as described in Attachment 8, Section 5 in accordance with s. NR 640.12. EOG will maintain a three-foot aisle spacing between rows and a minimum six-foot aisle spacing as exit routes to all doors at all times. Daily aisle space inspections will be made in accordance with the "EOG Container Storage Area Inspection Log" as shown in Attachment 6, Appendix A. During these aisle inspections, the inspector will make sure that a three foot aisle spacing is maintained between all rows of drums and a six foot aisle spacing is maintained for all exit routes. The inspector will also make sure that no obstructions are within any aisle spaces and if an obstruction is found, the inspector will take immediate action to clear the obstruction.*

*Should a drum be noted to be leaking, a hand dolly will be used to remove the drum from the storage area. The three foot aisle spacing provides ample room to wheel the dolly down an aisle and remove a drum from any given row of drums.*

**TANK REQUIREMENTS** (ch. NR 645, Wisconsin Administrative Code)

Comment #82: **EOG shall specify what types of tests will be performed on the tanks. s. NR 645.08, Wisconsin Administrative Code.**

EOG Response #82: *As part of the daily inspection schedule, EOG will perform visual inspection of the tanks for weld breaks, punctures, scrapes of protective coatings, cracks, structural damage, frost heave, and obvious corrosion. EOG will perform a yearly non-destructive ultrasonic test for metal thickness at pre-selected areas of the tank to determine the amount and average rate of corrosion, if any, that has taken place during the previous year. There will be a minimum of three examinations per tank.*



- One examination per storage tank of a freeboard area that is in contact with the blended fuel vapor mixture.
- One examination per storage tank of a periodically wetted area at approximately half the working level of the tank.
- One examination per tank of the heel volume area of the tank that is essentially always wetted except for maintenance inspection purposes.

In addition, EOG will perform pressure testing of the atmospheric storage tanks at 2 PSIG both at the time of manufacture and at time of complete installation before putting the tanks into service.

**Comment #83:** In Attachment 7, section 3, page 15, paragraph 3, EOG shall specify what tests will be performed on the tanks, "as required." s. NR 645.08, Wisconsin Administrative Code.

**EOG Response #83:** *EOG will provide this information to the department under another submittal.*

**Comment #84:** EOG shall provide further information on the feed systems, safety cutoff, the systems for monitoring tank levels in the tanks, bypass systems, pressure controls such as vents, and all leak detection devices. s. NR 645.06(1)(i)3., Wisconsin Administrative Code.

**EOG Response #84:** *EOG will provide information on the feed systems, safety cutoff, the systems for monitoring tank levels in the tanks, bypass systems, pressure controls such as vents, and all leak detection devices under a separate submittal to the department.*

**Comment #85:** EOG shall provide information to show compliance with the buffer zone requirements for tanks holding ignitable or reactive wastes. ss. NR 645.06(2)(c), and NR 645.13(2), Wisconsin Administrative Code.

**EOG Response #85:** *As shown on Sheet 2 of 18 (Attachment 15) the entire tank farm, lab pack building and the blending area within the storage/process building are located 50 feet from the facility line.*

**Comment #86:** EOG shall provide a more detailed description of how the tank systems shall be installed in compliance with ss. NR 645.08(2), (4) and (5), referenced from ss. NR 645.06(1)(i)1. and 6., Wisconsin Administrative Code. EOG shall confirm that the tanks will be tested after they are constructed and put into place.

**EOG Response #86:** *EOG will provide a more detailed description of how the tank systems shall be*



*installed in compliance with ss. NR 645.08(2), (4) and (5), referenced from ss. NR 645.06(1)(i) 1. and 6., Wisconsin Administrative Code. EOG shall confirm that the tanks will be tested after they are constructed and put into place. This information will be provided to the department under a separate submittal.*

**Comment #87:** EOG shall provide a more detailed description of how the secondary containment system for each tank system is designed and constructed to meet the requirements of ss. NR 645.06(1)(i) 7. and 9., and 645.09(3) to (8), Wisconsin Administrative Code. In addition to attachment 7, the location indicated in the location comments, some of the information was located in attachment 8, appendix A.

**EOG Response #87:** *EOG will provide a more detailed description of how the secondary containment system for each tank system is designed and constructed to meet the requirements of ss. NR 645.06(1)(i) 7. and 9., and 645.09(3) to (8), Wisconsin Administrative Code under a separate submittal. EOG has updated the checklist to include Attachment 8, Appendix A for location of this information. Attachment 14 contains a revised checklist.*

**Comment #88:** EOG shall provide calculations to show that if a hole is punctured in the wall of the tank near the containment area wall, that the spray of liquid coming out of the tank from the hole will remain in the containment area. ss. NR 645.06(2)(a), and NR 645.09, Wisconsin Administrative Code.

**EOG Response #88:** *No reactive or incompatible wastes will be stored in the tank farm. In the unlikely event of a tank puncture, EOG personnel will respond in a variety of ways. A potential tank puncture will be investigated immediately to determine whether any blended fuel tank contents are escaping the containment structure to the surrounding paved area as indicted on Sheet 2 of Attachment 15 of the September 1994 submittal. If contents are escaping, EOG personnel will utilize a portable tarp secured to the top of the tank at the perimeter railing to deflect the exit stream from the tank to within the containment area. Oil dry compound and portable oil socks will be utilized, if necessary, to clean any spillage outside the containment. It is important to note that the blended fuel will most often be a viscous material. Even a tank puncture of 0.50-inch diameter would probably only ooze material within the containment as opposed to spraying over the containment walls. The spraying distance calculations are submitted as Attachment 18 of this submittal. The calculations assume a "frictionless" fluid with a "frictionless" puncture to determine the worst case condition.*

*The area surrounding the blended fuel tank containment is completely paved to well beyond the distance the storage tank can spray a "frictionless" fluid.*





**Comment #89:** The roofing overhang on the tank farm will not leave the tank farm containment area completely free of precipitation. Although the containment seems to be designed with plenty of extra capacity, EOG shall address how precipitation will be handled that accumulates in this outside containment area. s. NR 645.09, Wisconsin Administrative Code.

**EOG Response #89:** EOG will handle any precipitation accumulated inside the outdoor secondary containment by manually pumping of the water to the storm sewer. If there is any evidence of spilled or leaking waste material within the containment area or contact of the blended fuel with the precipitation, then the accumulated precipitation will be pumped into one of the blended fuel storage tanks. The accumulated precipitation in the tank truck loading/unloading area is intended to be pumped into the blended fuel storage tanks as well if there is any evidence of spillage contacting the precipitation.

#### TYPOGRAPHICAL CORRECTIONS

**Comment #90:** Attachment 10, section 2, page 2, paragraph 1, refers to the personnel training, "regulatory requirements of WAC 630.11". The reference should be changed to, "WAC 630.16".

**EOG Response #90:** This typographical error has been corrected. Attachment 10 of this submittal contains the corrected page.

**Comment #91:** In attachment 10, section 2.2, page 4, the last line should add "aid" after "basic first."

**EOG Response #91:** This typographical error has been corrected. Attachment 10 of this submittal contains the corrected page.

**Comment #92:** Attachment 3, appendix E, section 1.1, page 1, states, "so old that they are unstable," should be changed to, "so old that they are unstable."

**EOG Response #92:** This typographical error has been corrected. Attachment 4 of this submittal contains the corrected page.

**Comment #93:** Attachment 3, appendix E, section 4.4, page 17, should read as, "revenues for the company."

**EOG Response #93:** This typographical error has been corrected. Attachment 4 of this submittal contains the corrected page.



February 27, 1995  
Mr. Pat Brady  
Page 29

**Comment #94:** In the location comments under environmental review, NR 680.06(6), you refer to attachment 3, appendix D. This information is located in Attachment 3, appendix E.

**EOG Response #94:** *This typographical error has been corrected. Attachment 14 of this submittal contains the corrected page.*

**Comment #95:** Attachment 5, section 5, page 32, paragraph 1, refers to "NR 630.12(g)" and should be changed to "NR 630.12(4)".

**EOG Response #95:** *This typographical error has been corrected. Attachment 5 of this submittal contains the corrected page.*

**Comment #96:** In attachment 7, section 2.1, page 7, paragraph 1, reads as, "or further consolidation," and should be changed to, "for further consideration."

**EOG Response #96:** *This typographical error has been corrected. Attachment 7 of this submittal contains the corrected page.*

**Comment #97:** Attachment 7, section 2.2.2, page 9, paragraph 2, reads as, "transferred to the field blending operation," and should be changed to "transferred to the fuel blending operation."

**EOG Response #97:** *This typographical error has been corrected. Attachment 7 of this submittal contains the corrected page.*





5611 West Hemlock Street • Milwaukee, WI 53223

EOG Disposal, Inc.

(414) 353-1156 • Fax (414) 353-1822

(800) 234-1156

April 21, 1995

Mr. Pat Brady  
Wisconsin Department of  
Natural Resources  
4041 North Richards Street  
P.O. Box 12436  
Milwaukee, WI 53212

RE: Feasibility Report and Plan of Operation  
Notice of Incompleteness Response for Design Related Issues  
EOG Disposal, Inc. (EOG) 5611 West Hemlock Street, Milwaukee, WI  
EPA ID#: WID988580056

Dear Mr. Brady,

Enclosed please find our subsequent response to your letter of incompleteness dated December 9, 1994 for EOG's September 1994 FRPO submittal. This response contains information regarding each of the design related issues of incompleteness and inadequacy.

As requested in your letter, EOG is submitting the following information as replacement pages and/or additional pages to the original document. All replacement pages and additional pages have been marked as such and include the date of this response submittal. This response has been prepared on a point by point basis from the December 9, 1994 Notice of Incompleteness letter for ease of review.

If you have any questions regarding this submittal, please contact me at (414) 353-1156.

Sincerely,  
EOG Disposal, Inc.

Michael C. Vilione, President  
VK Investments (Owner)

cc: Tom McElligott  
Ed Lynch



**Comment #12:**

EOG shall provide a clearer explanation of the drum auger operation at the site. This information shall, at a minimum, include: a plan sheet of the auger operation; whether both solid and hazardous waste will be processed in the auger; whether solids from the auger would be treated as a solid or a hazardous waste (Attachment 7, Section 2.2, Page 9); how solids will be transferred from the solids auger (whether the solids will be pumped); and the decision making process used to determine where the solids will be transferred.

**EOG Response #12:**

EOG will operate a drum auger system for the purpose of removing hazardous waste from drums. The system will consist of a conveyor to move the drums to the elevated level of the auger, the auger itself for the removal of materials from the drums, a chute which will have a movable gate for directing the waste to either a lined roll-off below or a screw conveyor system which will move the waste to the blend tank for mixing into a solvent matrix for ultimate use as fuel. Waste conveyed to the roll-off will be designated for proper disposal. EOG intends to use this auger system for hazardous waste only.

The waste to be managed in this operation will be evaluated for its ability to be blended into a solvent matrix. Those wastes considered too difficult for handling in the blending operation will be conveyed directly into the roll-off. As the roll-off is filled, it will be re-positioned to evenly distribute the waste. Those wastes considered appropriate for the fuel blending operation will be fed from the auger system chute into a screw conveyor system to the blend tank.

A ventilation system will be provided for the entire operation to assure adequate fresh air, and explosive-free atmosphere, and treatment of the exhaust air coming from this process. To accomplish efficient ventilation and removal of objectionable vapors, the roll-off area will be enclosed. The entrances to this enclosure will be a roll-up door for roll-offs and a man door for personnel. The auger chute will be ducted to the explosion-proof, spark-free ventilation fan. Air will thus be drawn from the source at the auger and the roll-off. This air will be treated by carbon adsorption before being discharged to the atmosphere.

A non-sparking auger and appropriate grounding techniques will be used to eliminate any possible sparking from the operation.

Text has been revised in Attachment 7, Section 2.2, Page 9. Attachment 18 of this submittal contains the revised pages. A drum auger process diagram (Sheet 11 of 16) and drum auger area plan (Sheet 12 of 16) are included in Attachment 19.

**Comment #14:**

EOG shall submit plan sheets showing site construction and operation topography. These plans should show how final construction will fit into the existing landscape. This should include cross sections, and construction specifications which show foundations of the facility structures. s. NR 680.05(1)(c)4.f., Wisconsin Administrative Code.

**EOG Response #14:**

Plans have been prepared which show proposed site construction and operation topography, and how the proposed grading blends into the existing landscape. A detailed field utility and topographic survey of the site was





performed by GAS and used for plan preparation. Plan sheet 3 of 16, entitled Site Grading and Paving (Attachment 19), shows existing site conditions and proposed paving and grading. Construction specifications for site grading, paving, and utility installation are included in Attachment 20. The plans and cross-sections of facility structures are shown on design drawings A1 (Sheet 6 of 16), S1 (Sheet 7 of 16), and S2 (Sheet 8 of 16) in Attachment 19.

**Comment #53:** EOG shall provide further information on the facility layout including building and structures foundation, sizing of receiving areas, sizing of major processes and processing equipment. ss. NR 640.06(1)(a)12., and NR 645.06(1)(a)12., Wisconsin Administrative Code.

**EOG Response #53:** Details of the building and structures foundations are in design drawings S1 (Sheet 7 of 16) and S2 (Sheet 8 of 16) in Attachment 19. Sizing of major processes and processing equipment are included in Drawing A1 (Sheet 6 of 16), Attachment 19.

**Comment #55:** EOG shall explain what provisions will be taken during the construction of the facility to ensure protection of groundwater and surface waters. ss NR 640.06(1)(a)15., and NR 645.06(1)(a)15., Wisconsin Administrative Code.

- The above sections and paragraphs of the State Code refer to the feasibility and plan of operation report. The specific items referenced are to be included in a narrative intended for determination of whether the site has potential for use as a hazardous waste storage or treatment facility and to identify and address any operating conditions which are necessary for the proper operation of the facility.

**EOG Response #55:** Provisions for protection of groundwater and surface waters during construction of the facility include the installation of erosion control measures within and around the site prior to land disturbance. Specifically, geotextile silt fencing will be installed around the site prior to excavation to intercept silt-laden stormwater runoff prior to entering the nearby water course and, ultimately, Lincoln Creek. Filter fabric will also be placed within existing storm sewer inlets on and near the site, and in new inlets as they are installed. An erosion control plan for construction is shown in Attachment 19, Sheet 1 of 16. Erosion control details are shown in Attachment 19, Sheet 5 of 16. Technical specification Section 01565, Erosion and Sediment Control, is included in Attachment 20, and describes the installation, maintenance, and removal of erosion control features.

No special measures are anticipated for protection of groundwater beyond those provided for surface waters, as there is presently no hazardous or contaminated material on-site which could reach groundwater, and none are expected to be produced as a result of construction activities.

**Comment #58:** Runoff control systems and storm, sanitary, and process sewerage systems are not presented on the site conditions map in attachment 15, sheet 3 of 18, as listed in the location comments. EOG shall provide a description of runoff control for the site and a description of the sanitary and storm sewers on the site. EOG provides the existing storm sewers in attachment 15, sheet 2 of 18, but EOG should also provide any



proposed storm sewer changes. EOG shall also present the drainage patterns for the site. ss. NR 640.06(1)(c)10., and NR 645.06(1)(c)as., Wisconsin Administrative Code.

- The above sections and paragraphs of the State Code are generally part of the feasibility and plan of operation report, and specifically part of the requirement for an existing and proposed site conditions topographic map.

EOG Response #58: Attachment 19 contains two plan sheets which show the existing and proposed topography and the existing and proposed storm sewer and sanitary sewer systems. Sheet 2 of 16, entitled Site Demolition and Utilities, shows the proposed storm sewer and sanitary sewer system for the site. Sheet 3 of 16, entitled Site Grading and Paving shows the existing and proposed contours which define the drainage pattern for the site.

All paved areas within the site will be sloped to drain toward sump catchbasins within the site. There will be no runoff from paved areas that will not be captured by the storm sewer system. The final storm sewer system manhole will have a remotely controlled, electrically operated shut-off valve which can be closed to prevent the discharge of water within the storm sewer from the site. Storm sewers shall be reinforced concrete pipe with gasketed joints.

A sanitary sewer lateral from the Lab Pack Building to the City's sanitary sewer in Hemlock Street will be installed to service bathroom facilities.

Comment #59: The site conditions map in attachment 15, sheet 3 of 18, does not show any barriers for drainage. EOG shall provide a site conditions map that shows any barriers to drainage on the site. ss. NR 640.06(1)(c)11 and NR 645.06(1)(c)13, Wisconsin Administrative Code.

EOG Response #59: There will be no barriers to drainage upon final grading and site construction. Positive drainage away from the site will be maintained for unpaved areas. All paved areas will be sloped to drain towards sump catchbasins within the site. There will be no runoff from paved areas that will not be captured by the storm sewer system. Refer to Sheet 2 of 16, entitled Site Demolition and Utilities, and Sheet 3 of 16, entitled Site Grading and Paving in Attachment 19.

Comment #60: EOG shall provide more detailed construction drawings for the whole site. I would like specifications on the following items:

- a. the container auger
- b. drum emptying under a nitrogen blanket
- c. the containment areas and the process / storage building (specifically the areas around the doorways)
- d. the blending tank and associated equipment
- e. tank foundations
- f. tank design specifications
- g. the associated piping at the site and the pipe joints.

ss. NR 640.06(1)(d) and NR 645.06(1)(d), Wisconsin Administrative Code.



EOG Response #60: For (a), refer to Attachment 19, Sheet 13 of 16.  
For (b), refer to Attachment 19, Sheet 11 of 16 and Sheet 12 of 16.  
For (c), refer to Attachment 19, design drawings A1 (Sheet 6 of 16), S1 (Sheet 7 of 16), and S2 (Sheet 8 of 16).  
For (d), refer to Attachment 19, Sheet 14 of 16 and Sheet 15 of 16.  
For (e), refer to Attachment 19, Sheet 8 of 16 and Sheet 9 of 16.  
For (f), refer to Attachment 19, Sheet 9 of 16 and tank specifications in Attachment 20.  
For (g), refer to Attachment 19, Sheet 10 of 16.

Comment #61: EOG shall provide an engineering plan that shows final site topography. EOG shall also show whether the final grade for the site will affect the proposed boundary fence, and if any fill will be added to build up the northeast corner of the site. ss. NR 640.06(1)(d)4., NR 640.06(1)(g)2., 645.06(1)(d)3., and NR 645.06(1)(g)2., Wisconsin Administrative Code.

- The above sections and paragraphs of the State Code discuss the need for a final site plan and the identification of grading, filling, or cleaning on the site.

EOG Response #61: Attachment 19 contains Sheet 3 of 16, entitled Site Grading and Paving, and Sheet 4 of 16, entitled Security Fence Plan, which shows existing and proposed contours for the project site. There will be grading and filling along the eastern and northeastern edges of the site to provide a level pad for the boundary fence and to support the paving in the northeast corner of the site.

Comment #63: EOG shall provide a plan sheet showing any surface water control structures. ss. NR 640.06(1)(g)2., and 645.06(1)(h)2., Wisconsin Administrative Code.

- The above sections and paragraphs of the State Code refer to engineering plan requirements for the project.

EOG Response #63: Attachment 19 contains sheet 5 of 16, entitled Miscellaneous Details. This sheet shows surface water control structures, including sumped catchbasins, manholes, and erosion control devices.

Comment #64: EOG shall clearly show any slope on the floor in each of the storage areas and also show how the slope would affect the containment capacity. ss. NR 640.06(2)(a)1. and 2., NR 640.13, NR 645.06(2)(a)1. and 2., and NR 645.09, Wisconsin Administrative Code.

EOG Response #64: Details of floor slope in all storage areas are presented in design drawings A1 (Sheet 6 of 16) and S2 (Sheet 8 of 16), Attachment 19. Containment Volume calculations are presented in Attachment 21.

Comment #72: EOG shall provide more extensive information in the operation and maintenance manual on specifications for site construction and operation and descriptions of daily operations. ss. NR 640.06(2)(d), and NR 645.06(2)(d), Wisconsin Administrative Code.

EOG Response #72: Specifications for site construction, including erosion control, grading, paving, storm sewer, sanitary sewer, and water service, are in Attachment 20.



**Comment #83:** In Attachment 7, section 3, page 15, paragraph 3, EOG shall specify what tests will be performed on the tanks, "as required."

**EOG Response #83:** A tank farm visual inspection will be performed daily for tank weld breaks, punctures, scrapes of protective coatings, cracks, structural damage, frost heave, and corrosion.

Text has been revised in Attachment 7, Section 3, Page 15, Paragraph 3. Attachment 18 of this submittal contains the revised pages.

**Comment #84:** EOG shall provide further information on the feed systems, safety cutoff, the systems for monitoring tank levels in the tanks, bypass systems, pressure controls such as vents, and all leak detection devices. ss. NR 645.06(1)(i)3, Wisconsin Administrative Code.

**EOG Response #84:** Further information on systems operations are provided as follows (see also process and instrumentation diagrams; Sheet 14 of 16, Sheet 15 of 16, and Sheet 16 of 16 in Attachment 19; and equipment specifications in Attachment 20).

#### **AGITATORS:**

**AG-1:** Agitator for Storage Tank ST-1. Agitator is controlled by explosion-proof push button actuation at the tank. Agitator operates continuously while product is in the tank. Agitator is manually deactivated by the push button when the tank is not in use or as management dictates.

**AG-2:** Agitator for Storage Tank ST-2. Agitator is controlled by explosion-proof push button actuation at the tank. Agitator operates continuously while product is in the tank. Agitator is manually deactivated by the push button when the tank is not in use or as management dictates.

**AG-3:** Agitator for Storage Tank ST-3. Agitator is controlled by explosion-proof push button actuation at the tank. Agitator operates continuously while product is in the tank. Agitator is manually deactivated by the push button when the tank is not in use or as management dictates.

**AG-4:** Agitator for Storage Tank ST-4. Agitator is controlled by explosion-proof push button actuation at the tank. Agitator operates continuously while product is in the tank. Agitator is manually deactivated by the push button when the tank is not in use or as management dictates.

**AG-5:** Agitator for Blend Tank BT-1. Agitator is controlled by explosion-proof push button actuation at the tank. Motor starter is interlocked with timer to operate agitator for ten minutes before automatically requiring operator to re-activate if further blending is required.

#### **UNLOADING TANKER TO STORAGE TANKS:**

This operation is controlled from a Control Panel, CP-1, located at the pumping station. Product hose and vapor return hose are connected to tanker.





ST-1, ST-2, ST-3, or ST-4 is selected. GV-1 and GV-12 are left in closed position. GV-2, GV-35, and GV-13 are opened. System is activated by push button.

Upon activation, free capacity of selected storage tank is calculated based on level reading from ultrasonic level detector, L1. If free capacity is less than 5,000 gallons, check capacity alarm light is activated on control panel. If this circumstance is acceptable to the operator, operator pushes acknowledge button and system is activated. Otherwise, a different tank selection is made.

Upon activation, ABV-1 remains in the closed position, three-way solenoid S-6 opens, allowing air onto the cylinder of ABV-2, thereby opening ABV-2. Tank fill valve ABV-7, ABV-8, ABV-9, or ABV-10 and tank vent valve ABV-12, ABV-13, ABV-14, or ABV-15 are similarly opened, depending on the tank selected for filling. ABV-17 is also similarly opened. As tank fills, vapors are vented back to the tanker.

If the level in the selected tank reaches the high level position setting for L1, the system is deactivated with all three-way solenoids venting and actuated valves thereby returning to closed position. An alarm light is activated at the control panel. Alarm is deactivated upon acknowledgment by the operator. At this point, a different storage tank is selected as outlined above and the system is activated again.

Upon completion of pumping out the tanker, the pump P-4 or P-5 is allowed to empty the suction lines. The system is deactivated by push button at the control panel CP-1, allowing the three-way solenoid valves on the actuated valves to vent, thereby closing the actuated ball valves.

GV-2, GV-35, and GV-13 are closed, and product and vapor hoses are disconnected.

The system is limited to 30 minutes of continuous operation. If the system operates for 25 minutes continuously, an alarm light is activated requiring acknowledgment from the operator. Once acknowledged, the system will operate for another cycle.

#### TRANSFERRING FROM STORAGE TANK TO BLEND TANK BT-1

This operation is controlled from control panel CP-1 located at the pumping stations.

The operation of Transfer from S.T. to B.T. is selected. Pump P-4 or P-5 is selected. Manual valving is checked for consistency with pump selection. Storage Tank ST-1, ST-2, ST-3, or ST-4 is selected. GV-2, GV-35, and TV-13 are left in closed position. GV-1 and GV-12 are opened. System is activated by push button.

Upon activation, ABV-2 remains in the closed position; three-way solenoid S-5 opens, allowing air onto the cylinder of ABV-1, thereby opening ABV-1. Tank discharge valve ABV-3, ABV-4, ABV-5, or ABV-6 is similarly opened, depending on the tank selected for transferring. Tank vent valve ABV-12, ABV-13, ABV-14, or ABV-15 are similarly opened depending on the tank



selected. Blend tank vent valve ABV-16 is similarly opened. As blend tank fills, vapors are vented back to the appropriate storage tank.

If the level in the blend tank reaches the high level position setting for L1, the system is deactivated with all three-way solenoids venting and actuated valves thereby returning to closed position. An alarm light is activated at the control panel. Alarm is deactivated upon acknowledgment by the operator.

Upon completion of transferring from the selected storage tank to the blend tank, the system is deactivated. All actuated valves are closed and all gate valves are closed.

The system is limited to 30 minutes of continuous operation. If the system operates for 25 minutes continuously, an alarm sounds requiring acknowledgment from the operator. Once acknowledged, the system will operate for another cycle.

#### TRANSFERRING FROM BLEND TANK BT-1 TO STORAGE TANK

This operation is controlled from a control panel, CP-2, located at the blend tank pumping station.

The operation of Transfer from B.T. to S.T. is selected. Pump P-2 or P-3 is selected. Manual valving is checked for consistency with pump selection. Storage Tank ST-1, ST-2, ST-3, or ST-4 is selected. GV-21 is left in closed position. System is activated by push button.

Upon activation, free capacity of selected storage tank is calculated based on level reading from ultrasonic level detector, L1, in that storage tank. The amount to be pumped from blend tank is calculated based on level reading from L1 in blend tank. If free capacity in the selected storage tank is less than the amount to be pumped from the blend tank, check capacity alarm light is activated on control panel. If this circumstance is acceptable to the operator, operator pushes acknowledge button and system is activated. Otherwise, a different storage tank selection is made.

Upon activation, three-way solenoid S-18 opens, allowing air onto the cylinder of ABV-11, thereby opening ABV-11. Storage tank inlet valve ABV-7, ABV-8, ABV-9, or ABV-10 is similarly opened, depending on the storage tank selected for transferring. Blend tank vent valve ABV-16 and storage tank vent valve ABV-12, ABV-13, ABV-14, or ABV-15 are similarly opened. As storage tank is filled, vapors are vented back to blend tank.

If the level in the selected storage tank reaches the high level position setting for L1, the system is deactivated with all three-way solenoid venting and actuating valves thereby returning to closed position. An alarm light is activated at the control panel. Alarm is deactivated upon acknowledgment by the operator.

Upon completion of pumping out the blend tank, the pump P-2 or P-3 is allowed to empty the suction lines. The system is deactivated by push button at the control panel CP-2, allowing the three-way solenoid valves on the actuated valves to vent thereby closing the actuated ball valves.



*The system is limited to 30 minutes of continuous operation. If the system operates for 25 minutes continuously, an alarm light is activated, requiring acknowledgment from the operator. Once acknowledged, the system will operate for another cycle.*

#### **TRANSFERRING FROM STORAGE TANK TO TANKER**

*This operation is controlled from a control panel, CP-1, located at the pumping station.*

*The operation of Transfer from S.T. to Tanker is selected. Pump P-4 or P-5 is selected. Manual valving is checked for consistency with pump selection. Storage Tank ST-1, ST-2, ST-3, or ST-4 is selected. GV-2, GV-12, and GV-35 are left in closed position. GV-1 and GV-13 are opened. System is activated by push button.*

*Upon activation, three-way solenoid to storage tank discharge actuated valve ABV-3, ABV-4, ABV-5, or ABV-6 opens, allowing air onto the cylinder of the corresponding valve, thereby opening that valve. Storage tank nitrogen solenoid valve S-12, S-13, S-14, or S-15, depending on the tank selected, is also opened to replace the pumped volume with nitrogen.*

*Tanker level is monitored by the operator and the system is deactivated at the appropriate time. GV-1 and GV-13 are closed and the product hose is disconnected.*

*The system is limited to 25 minutes of continuous operation. If the system operates for 20 minutes continuously, an alarm sounds requiring acknowledgment from the operator. Once acknowledged, the system will operate for another cycle.*

#### **OPERATION OF DRUM AUGER AND CONVEYOR**

*Drum auger system is operated according to the manufacturer's instructions. Drums are staged after evaluation for use in fuel blending. If drum contents are to be routed to blend tank BT-1, the gate in the chute at the auger discharge is placed in the position to feed the emptied drum contents into the conveyance system to blend tank BT-1. Slide gate valve SGV-1 is opened, and operation of the auger system is commenced. Drums are emptied by the system into the conveyance system which conveys them to blend tank BT-1. At completion of blend tank loading, the auger system is deactivated and SGV-1 is closed.*

*If drum contents are evaluated as inappropriate for blending, the gate in the chute is moved to discharge emptied drum contents into roll-off below drum auger. Upon completion of drum emptying, auger is deactivated.*

**Comment #86:**

**EOG shall provide a more detailed description of how the tank systems shall be installed in compliance with ss. NR 645.08(2), (4) and (5), referenced from ss. NR 645.06(1)(i)1. and 6., Wisconsin Administrative Code. EOG shall confirm that the tanks will be tested after they are constructed and put into place.**



- The above section and paragraphs of the State Code pertain to inspecting the aboveground tank system after installation and before active service. Paragraph (2) specifies criteria for a visual inspection of all tank system components and certification by a qualified individual. Paragraph (4) specifies criteria for leak testing the tank system. Paragraph (5) specifies criteria for supporting and protecting all ancillary equipment.

EOG Response #86

**NR 645.08(2)**—The installation of all aboveground storage tank systems will be observed by an independent, qualified installation inspector or an independent registered professional engineer. During installation, the inspector will insure that manufacturer's specifications concerning installation be followed, or that recommended industry standards be followed (i.e., Steel Tank Institute, "Installation Instructions for Factory Fabricated Aboveground Tanks;" and Petroleum Equipment Institute, "Recommended Practices for Installation of Aboveground Storage Systems for Motor Vehicle Fueling"). After installation, the qualified inspector will observe the tank system for any weld breaks, punctures, scrapes of protective coatings, cracks, corrosion, or other structural damage. Any damage will be repaired prior to placing the tank system into active service.

**NR 645.08(4)**—After installation and prior to active service, each tank and associated ancillary equipment will be tested for tightness by an independent, qualified inspector. Leak testing will consist of air pressure testing and will be performed according to the tank manufacturer's specifications. The tank itself will be pressurized to between 1-1/2 to 2-1/2 pounds per square inch as recommended in the Steel Tank Institute document "Installation Instructions for Factory Fabricated Aboveground Tanks (R912-91)," dated April 4, 1991, and the Petroleum Equipment Institute document "Recommended Practices for Installation of Aboveground Storage Systems for Motor Vehicle Fueling (PEI/R200-92)." Piping will be pressured separately from the tank at a pressure of 50 pounds per square inch. All fittings to the tank and piping and all piping connections will be soaped during testing to detect leakage. All sources of leakage will be repaired, refit, and retested before the tank system is placed in active service.

**NR 645.08(5)**—All piping and ancillary equipment will be supported and protected as indicated on Sheet 10 of 16 in Attachment 19. Supplemental to this drawing, the piping will be installed straight and true without springing, forcing, or bending. Installation shall be neat and completed in a workmanlike manner. Piping shall be installed in full length units to minimize number of joints.

All piping shall be rigidly supported and anchored so that there is no movement or visible sagging between supports. No support from connected equipment will be allowed.

All piping support design, construction, materials, and installation shall be in accordance with the latest applicable provision of the Code for Pressure Piping, ANSI B31.1, unless otherwise specified herein.

In the design of piping supports, consideration shall be given to all factors such as thermal expansion, weight, support reactions, and expansion joint reactions. Supports shall not include excessive strain in the piping, connected equipment, or building structure.





*Pipe deflection between supports shall be limited to 1/8-inch maximum with normal operating contents in the piping or 3/8-inch with maximum loading. Nominal pipe support spacing shall be 10 feet.*

*Supports shall be located and arranged so as not to interfere with or obstruct other piping, raceways, lighting, walkways, stairways, headroom, and equipment operation and maintenance spaces.*

*The net supporting effect at operating condition shall not induce forces or moments on the piping system terminals. Under conditions other than operating, the supporting effect shall not induce excessive forces or moments on the piping, equipment or supports.*

*Vertical pipe supports shall be protected by ballards where subject to vehicle traffic. Where piping passes through walls or roofs, the piping assembly shall be provided with a sleeve or collar per recommendation of building manufacturer.*

*Piping that is located in exterior areas shall be supported and installed in a piping trough with a removable gasketed top cover assembly. The piping system shall be sloped toward a collector sump to permit detection of leakage in the carrier pipe. Since piping runs are relatively short, thermal loops or expansion joints are not anticipated.*

**Comment #87:**

**EOG shall provide a more detailed description of how the secondary containment system for each tank system is designed and constructed to meet the requirements of ss. NR 645.06(1)(i)7. and 9., and 645.09(3) to (8), Wisconsin Administrative Code. In addition to Attachment 7, the location indicated in the location comments, some of the information was located in Attachment 8, Appendix A.**

- The above sections and paragraphs of the State Code require that detailed plans and specifications be provided explaining how secondary containment for each tank system will be designed, installed, and operated to prevent any migration of wastes or accumulated liquids out of the system to soil, groundwater, or surface water, and how the system is capable of detecting and collecting releases and accumulated liquids until the collected material is removed. NR 645.06(1)(i)9 requires a description of controls and practices to prevent spills and overflows.

**EOG Response #87:** **NR 645.09(5)(a)—Secondary containment will be constructed as indicated on Drawing S2 (Sheet 8 of 16) in Attachment 19. The walls and floor will be constructed of poured, reinforced concrete. The floor and walls will be constructed of 12-inch thick concrete. Concrete pads will be provided for additional support directly beneath the tank supports. Concrete in the floor will be reinforced as indicated to reduce cracking and provide adequate support for the tanks (see stress calculations provided in Attachment 21). The walls will be reinforced to resist cracking and to resist overturning (see stress calculations in Attachment 21).**

*The tank system will store various flammable petroleum products, inks, and organic solvents which will not aggressively react with or degrade the concrete, but which could progressively corrode the concrete over prolonged*



direct exposure. Therefore, to prolong the life of the concrete and to seal pores in the concrete, the inside walls and floor of the secondary containment system will be coated with an epoxy resin which is compatible with the stored wastes. To provide for uniform coating, the inside surfaces of the concrete secondary containment will be troweled smooth. The concrete surfaces will be prepared according to the epoxy manufacturer's specifications (etched with muriatic acid, rinsed, and neutralized with tri-sodium phosphate) prior to application. The resulting epoxy coating will be approximately 30-mil thick. All joints in the concrete will be fitted with continuous stainless steel water stops and sealed with a flexible joint sealing compound which is compatible with the stored waste (see Sheet 8 of 16 in Attachment 19).

**NR 645.09(5)(b)**—The tank system will be placed on a reinforced concrete slab having a minimum thickness of 12 inches (see Sheet 8 of 16 in Attachment 19). The foundation has been designed to resist pressure gradients from above and below, and is capable of preventing failure due to settlement, compression or uplift (see stress calculations in Attachment 21).

**NR 645.09(5)(c)**—The tank system will be provided with leak detection which is designed to detect failure within the tank system and associated ancillary equipment located inside the secondary containment. The method of leak detection will be twofold:

1. A sump will be placed inside the secondary containment as indicated on Sheet 7 of 16 in Attachment 19. The sump will contain a liquid level sensor designed to automatically alert site personnel to the presence of liquids within the sump on a continuous basis.
2. During normal business hours, the tank system will be inspected for leakage on a daily basis.

Also, to prevent overfills from occurring, each tank will be fitted with overflow alarms and a liquid level sensor to provide electronic tank gauging.

Aboveground piping located outside the secondary containment walls will be enclosed by a secondary containment jacket as indicated on Sheet 10 of 16 in Attachment 19. The containment jacket will be sloped to a small collection sump integral to the jacket. The sump will be fitted with a liquid level sensor which is designed to alert site personnel to the presence of liquids on a continuous basis.

**NR 645.09(5)(d)**—The floor of the secondary containment is designed to slope towards a collection sump which will be fitted with a liquid level sensor alarm (see Sheet 7 of 16 in Attachment 19). The secondary containment jacket for external piping is also designed to slope towards a collection sump which will contain a liquid level sensor alarm. Liquids which accumulate within the secondary containment sumps will be removed by pumping within 24 hours.

**NR 645.09(6)**—Secondary containment for the tank system is considered to be an external, reinforced concrete liner.



NR 645.09(7)(a)—The concrete liner system is designed to contain 100% of the capacity of the largest tank (12,000 gallons) and ancillary equipment within its boundary (see tank volume calculations in Attachment 21).

The tank system is fully covered to prevent run-on or infiltration of precipitation into the concrete liner as indicated on Sheet 8 of 16 in Attachment 19.

The walls and floor of the concrete liner are reinforced with two layers of re-bar, and therefore should provide maximum resistance to cracking. The concrete liner walls will be constructed with footings located below the local frost line and, as such, should eliminate or limit differential movements caused by frost heave and periodic freeze-thaw cycles (see Sheet 8 of 16 in Attachment 19). In addition, all joints in the concrete liner will be fitted with continuous stainless steel water stops as indicated on Sheet 8 of 16 in Attachment 19.

The concrete liner is designed to completely surround the tanks and to cover all surrounding earth likely to come into contact with the waste if the waste is released from the tank (see Sheet 7 of 16 and Sheet 8 of 16 in Attachment 19).





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(800) 234-1156

November 10, 1995

Mr. Pat Brady  
Wisconsin Department of  
Natural Resources  
4041 North Richards Street  
P.O. Box 12436  
Milwaukee, Wisconsin 53212

RE: EOG Disposal, Inc. 5611 West Hemlock Street, Milwaukee, WI  
EPA ID# WID003967148  
Feasibility and Plan of Operation Report Notice of Completeness & Preliminary  
Determination

Dear Mr. Brady,

Enclosed please find our subsequent response to your letter dated October 11, 1995. This response contains information regarding each of the conditions in the preliminary FPOR determination.

EOG is submitting the following information as replacement pages and/or additional pages to the original document. All replacement pages and additional pages have been marked as such and include the date of this response submittal. This response has been prepared on a point by point basis from the October 11, 1995 letter for ease of review.

If you have any questions regarding this submittal, please contact me at (414) 353-1156.

Sincerely,  
EOG Disposal, Inc.

Michael C. Vilione, President  
VK Investments (Owner)

cc: Tom McElligott  
Ed Lynch





**Comment #1:**

EOG shall provide details on the connections to the tanks in the lab pack building. EOG shall also include a narrative describing the filling and emptying of these tanks. EOG shall provide descriptions of the supports for these tanks. EOG shall explain how these tanks and their secondary containment units will achieve compliance with s. NR 645.09(4) and (5), Wisconsin Administrative Code.

EOG will operate two drum pump-out systems in the Lab Pack Building. One will be for the purpose of removing acids from drums and the second will be for the removal of bases from the drums. Each system will consist of a suction tube for removing liquid from the drums, a stainless steel/teflon trim double diaphragm air driven pump, and a 5,500 gallon tank of the appropriate material, along with all related piping and valves as shown on Sheet 1 of 3 located in Attachment 23.

Acid waste will be pumped through the acid piping system into the Acid tank by opening the proper valves and actuating the air driven acid waste pump. Upon completion of pumping from a drum, the ball valve to the suction tube will be closed, the pump will be deactivated, the tube will be removed from the drum and either a new drum will be pumped or all valves will be closed to end the procedure. Base wastes will be pumped from drums in the same manner using the base system. Displaced air from the base system will be vented to the atmosphere outside the building. Vapors displaced from the acid tank will be vented to the caustic scrubber.

Each tank will be emptied by a vacuum tanker initially with piping provisions to be made for the addition of 3" gear pumps. Evacuation of the tanks will be accomplished by the connection of the proper "dry disconnect" fittings to the matching fittings on the truck, opening of the appropriate valves, and removal of the material from the storage tank into the tanker for transport. Upon completion, the valves will be closed and the "dry disconnect" fittings will be disconnected.

The tanks will be designed with dished bottoms and supports as shown on Plan Sheet 2 of 3 located in Attachment 23. The supports will be designed to support the stored liquids and the weight of a completely filled tank, structural calculations are located in Attachment 24. The tank bottoms will be elevated 2 feet off the floor slab by the supports to allow visual inspection of the tank bottom for leakage. The inside of the tanks will be lined with an epoxy coating to eliminate corrosion. The exterior of the tanks will be painted with enamel to minimize corrosion.

Secondary containment will be constructed as indicated in Plan Sheet 2 of 3. The walls and floor will be constructed of poured, reinforced concrete. The floor will be constructed of an eight-inch thick concrete base, followed by a synthetic, chemical resistant (acid/base) liner, followed by a six-inch



thick concrete top slab. The walls will be constructed of 12-inch thick reinforced concrete. Concrete pads will be provided for additional support directly beneath the tank supports. Concrete in the floor will be reinforced to reduce cracking and provide adequate support for the tanks. The foundation (floor) will be designed to resist pressure gradients from above and below, and is capable of preventing failure due to settlement, compression, or uplift (see stress calculations provided in Attachment 24). The walls will also be reinforced to resist cracking.

To prolong the life of the concrete and to seal pores in the concrete, the inside walls and floor of the secondary containment systems will be coated with an epoxy resin which is compatible with the stored wastes. To provide for uniform coating, the inside surfaces of the concrete secondary containment will be troweled smooth. The concrete surfaces will be prepared according to the epoxy manufacturer's specifications (etched with muriatic acid, rinsed and neutralized with tri-sodium phosphate) prior to application. The resulting epoxy will be approximately 30-mil thick. All joints in the concrete will be filled with continuous stainless steel water stops and sealed with flexible joint sealing compound which is compatible with the stored waste.

Secondary containment for the tank systems is considered to be an external, reinforced concrete liner. The concrete liner systems are designed to contain 100% of the capacity of the largest tank (5,000 gallons) and ancillary equipment within its boundary (see tank volume calculations in Attachment 8, Appendix A of the FPOR). The tank systems are fully enclosed within a building and are therefore protected from run-on or infiltration of precipitation.

Leak detection will be accomplished by visual inspection on a daily basis. Any accumulated liquids will be removed by pumping or absorption immediately. Any defective (leaking) tank system components will be repaired as soon as practicable. To prevent overspill from occurring, each tank will be fitted with overfill alarms and a liquid level sensor to provide electronic tank gauging.

**Comment #2:**

**EOG Shall provide sidewall and bottom structure and corrosion calculations on the 6 proposed licensed hazardous waste tanks in accordance with s. NR 645.08, Wisconsin Administrative Code.**

Sidewall and bottom structure and corrosion calculations on the 6 proposed licensed hazardous waste tanks are located in Attachment 25.



**Comment #3:**

EOG shall have the submittal dated and all additional information submitted to complete the FPOR certified by a professional engineer certified in the state of Wisconsin. s.NR 680.05(1)(a)(1)., Wisconsin Administrative Code. The P.E. signature and stamp is for the state of North Carolina and explains that the engineer has applied for P.E. Status from the state of Wisconsin. A P.E. certification from the State of Wisconsin is required. In addition to the P.E. certification on the drawings, a P.E. certification should cover the entire submittal and any revisions and/or additions to the FPOR. Whenever any additions, revisions and/or modifications are submitted regarding the FPOR, EOG shall submit the documents under the certification of a state of Wisconsin P.E. s.NR 680.05(1)(a)1., Wisconsin Administrative Code.

P.E. certifications are located in Attachment 26 of this submittal.

**Comment #4.**

EOG shall explain if the auger system will be directly vented to the vapor recovery system or through the carbon unit to the atmosphere.

Air from the auger system will be vented through the carbon adsorption unit to remove the organic contaminants before being discharged into the atmosphere.

**Comment #5:**

In response to #41 of the December 9, 1994 , notice of incompleteness, EOG was requested to make changes to table 2, located in attachment 3, pages 39 through 58. No changes were observed in table 2. EOG shall make the requested changes to table 2. EOG shall also explain whether the analyses listed in table 2 are the only analyses performed on the waste.

In the February 27, 1995 response to the Notice of Incompleteness EOG included a revised Table 2 that contained an additional column indicating that Compatability analysis would be completed for each Primary Waste Type. The analysis listed in Table 2 are the only analyses performed unless other analysis is deemed necessary by management. This other analysis may include additional fingerprint analysis such as reactivity, organic solvent identification, viscosity, acid reactivity, oxidizer and percent ash to further qualify materials to meet outbound facility specifications. A descriptor defining other analysis has been added Attachment 5, Table 2, page 64 of the FPOR. Attachment 27 of this submittal contains the revised table.



**Comment #6:**

In your response to #43 and #44 of the December 9, 1994, notice of incompleteness, EOG states that samples received on-site will be analyzed by an on-site chemist. EOG shall confirm that the on-site analysis, which is part of the waste analysis plan, shall be carried out in a laboratory which is certified or registered under ch. NR 149, Wisconsin Administrative Code. EOG makes the distinction between waste characterization and determining the acceptability of waste materials. Both are part of the waste analysis plan and therefore both shall be performed by a laboratory which is certified or registered under ch. NR 149, Wisconsin Administrative Code, as required by s NR 630.13(2), Wisconsin Administrative Code. EOG shall provide a clear explanation and provide revised language for the FPOR.

Analysis that is completed for waste characterization purposes and acceptability determination will be completed by a laboratory which is certified or registered under ch. NR 149, Wisconsin Administrative Code. Attachment 5, Section 4 page 36 and Attachment 5, section 7 page 42 of the FPOR have been changed to clarify this issue. Attachment 27 of this submittal contains the revised pages.

**Comment #7:**

In attachment 5, section 5.1., the seventh line states, "A minimum of ten percent of the containers... shall be sampled", and the next line states, "All incoming wastes are sampled." EOG shall provide further clarification on their sampling and provide replacement language in attachment 5, section 5.1., which clarifies their sampling.

A minimum of 10% of the containers of each generator's waste stream shipment is sampled. Attachment 5, section 5.1, page 37 of the FPOR has been changed to clarify this issue. Attachment 27 of this submittal contains this revised page.

**Comment #8:**

EOG shall revise the Waste Profile Sheet in attachment 5, appendix A, so that it clearly shows if the results are from testing, generator knowledge, or some other method.

EOGs Waste Profile Sheet has been revised to show that the results are from testing, generator knowledge or other method. Attachment 5, Appendix A of the FPOR has been revised to clarify this issue. Attachment 27 of this submittal contains the revised Waste Profile Sheet.





**Comment #9:** In response to #45 of the December 9, 1994 notice of incompleteness, EOG shall provide replacement text which refers to attachment 17 rather than attachment 15.

Attachment 17 of EOGs February 27, 1995 submittal contained revised plan sheets that were to replace those in attachment 15 of the original FPOR. Therefore, the text in response to question #45 is correct in referring to "Sheets 9, 10 and 11 of Attachment 15".

**Comment #10:** In response to #50 of the December 9, 1994, Notice of Incompleteness, EOG refers to "north of the paved roadway", in response to where trucks might be waiting. EOG shall further explain whether that area is the parking lot north of their proposed office building or on Hemlock Street and provide revised language in the FPOR reflecting this point. This area should be identified on a plan sheet.

Trucks which are waiting to load or unload will be staged within a fenced area located on the EOG property. This area is located directly northeast of the EOG offices and has dimensions of 98 feet by 65 feet. This area will only be used for truck staging when heavy traffic is experienced at the site loading and unloading facilities and roll-off staging area which are located to the south. The trucks will be attended by their drivers while waiting to load or unload. The location of the proposed staging area is shown on the revised Site Grading and Paving Plan, Sheet 3 of 16. Attachment 3, Section 5 page 13 of the FPOR has been changed to clarify this issue. Attachment 27 of this submittal contains the revised page and revised plan sheet.

**Comment #11:** In #54 of the December 9, 1994, notice of incompleteness, EOG was requested to submit to the department a specific time table laying out their plans for construction on their hazardous waste management facility. EOG must again submit a more specific time table. In addition to their response, EOG shall submit a proposal for seeking licensing of the facility and their anticipated time table for requesting licensing and whether this will be requested all at once or in stages.

EOG is planning to construct their facility in three general phases according to the following schedule:

Phase 1: Retrofit of the existing building will begin December 1, 1995. Construction is expected to take 3 months.

Phase II: Construction of the Lab Pack Depack building will begin April 1, 1996 and is expected to take 4-5 months.



Phase III: Construction of the tank farm will begin mid-April 1996, expected to take 4 months to construct.

EOG will seek licensing for containers and tanks upon completing each construction phase, and upon submitting a construction observation report for each phase as required in NR 680.08, Wisconsin Administrative Code. An application for licensing will accompany each report. EOG will seek licensing as follows:

- \* A container license after construction of Phase I;
- \* A modification to the container license, and a tank license after construction of Phase II; and
- \* A modification to the tank license after construction of Phase III.

**Comment #12:** In your response to #65 of the December 9, 1994, notice of incompleteness, EOG shall address how the containment area for lab pack container storage area complies with the requirements of s. NR 640.13, Wisconsin Administrative Code, and how the containers will be protected from contact with accumulated liquids.

The floors in each of the lab pack building rooms will have a containment system designed and constructed to have a continuous base which is free of cracks or gaps and is impervious to the material to be stored, and will contain any hazardous waste discharges, leaks, spills and precipitation until the collected materials is detected and can be removed. The doorway of each of the five rooms will have a 6-inch impervious ramp. Upon room entry there will be a series of grates inset 6 inches above the room floor. This grating system will provide an elevated surface for containers to avoid any chance of contact with accumulated liquids.

**Comment #13:** In response to #73 of the December 9, 1994, notice of incompleteness, no information was presented on the outbound shipment of containers. EOG shall include information on the outbound shipment of containers.

Any containerized materials that are destined for outbound shipment will be packaged according to DOT specifications. All shipments will include properly completed manifests and land disposal restriction forms. Lab packed drums will also include inventory sheets identifying drum contents. Drums shipping from EOG will be properly labeled in accordance with 49 CFR 174.400 General Labeling requirements. All containers shipping off



site will be sent to fully permitted and licensed transfer, storage and disposal facilities.

**Comment #14:**

As a response to #80 of the December 9, 1994, notice of incompleteness, EOG shall inform the department whether spare parts are kept on site for any of the units of importance, where operation of the facility could be stopped because of need to wait for a replacement part.

EOG will maintain an inventory of spare parts that will include the following:

**AGITATORS:**

**AG-1 - AG-4**

Agitators for tanks ST-1 through 4. Components consist of agitator blades, baffles, shafts, seals, shaft couplings, gear reducers and motors. Spare parts will include one gear reducer, one motor, two internal parts for seals, two internal parts for seals, two internal parts for bearings and two shaft couplings.

**AG-5**

30 horsepower agitator for Blend Tank BT-1. Components consist of motor, gear reducer, bearings, shaft, seal, shaft coupling, belts and blade.

**VALVES, PUMPS, FILTERS LIQUID LEVEL CONTROLS:**

1/4" bronze ball valves with ss/teflon trim.

1-1/2" bronze ball valve with ss/teflon trim.

3/4" needle valves.

3" carbon steel gate valves with 304 ss trim.

1-1/2" spring loaded ss check valve.

3" spring loaded ss check valves.

1/2" explosion proof 120v solenoid valves.

2" in-line flame arrestor.

1-1/2" explosion-proof 120v solenoid valve.

2" pressure/vacuum relief valve.

2" 2 piece ATOSR actuated valves.

3" filters with 3/16" ss perforated screen.

3" 3 piece ball valves ATOSR.

Diaphragms and seat assemblies for double diaphragm pump.

Gears, bearings and seals for 3" gear pump.

Dual level sensors.



This spare part inventory will allow for minimal down time.

**Comment #15:** EOG shall incorporate their responses to #84, #86 & #87 of the December 9, 1994, notice of incompleteness into the body of the FPOR.

Responses #84, #86 & 87 have been incorporated into Attachment 7, "Process Information" and Attachment 8, "Preparedness & Prevention" of the FPOR. Attachment 27 of this submittal contains the revised pages.

**Comment #16:** Even though only solids will be stored in the lugger boxes, EOG shall provide adequate containment as required by s. NR 640.13, Wisconsin Administrative Code. EOG shall submit plans showing how they comply with all of the containment requirements of s. NR 640.13, Wisconsin Administrative Code.

The outside area used to store roll-off containers is shown on Plan Sheet 3 of 3 located in Attachment 23 of this submittal. The area will be designed to accept a maximum of six roll-off containers. Each roll-off will have approximate dimensions of 20 feet long by 7.5 feet wide by 3.5 feet high, and will have an approximate capacity of 20 cubic yards. The waste material stored in each roll-off will consist of solids and be of like chemical compatibility.

The roll-off container storage will be constructed as shown on plan sheet 3 of 3. The floor slab will be constructed of eight-inch thick reinforced concrete. The floor slab will be placed on an engineered backfill to minimize frost heave. The foundation (floor slab and footings) is adequate to support the load of six roll-off containers filled to maximum capacity (See structural loading calculations in Attachment 28). All construction joints will be fitted with stainless steel water stops and sealed with caulk (which is compatible with the stored waste) to prevent migration of accumulated liquids.

Secondary containment in the form of concrete curbing will be monolithically joined to the concrete floor slab. The height of the curbing will vary with the slope of the floor slab as indicated on Plan Sheet 3 of 3. The secondary containment structure will have a capacity to hold the contents of one roll-off container (see volume calculations for secondary containment in Attachment 28). The floor slab will be pitched to collect and hold any spilled or accumulated liquids within the secondary containment structure.

The storage area will be enclosed with a canopy as indicated on Plan Sheet 3 of 3. The canopy will be designed to allow safe loading and unloading





of roll-off containers and also prevent the accumulation of precipitation within the secondary containment structure. The canopy will be supported by concrete footings which will extend below the frost line to prevent the effects of frost heave. The concrete apron in front of the storage area will be pitched away from the storage area to prevent stormwater from entering the secondary containment structure.

The storage area will be inspected daily for leaking containers or accumulated liquids. Any accumulated liquids will be removed immediately by pumping, vacuuming, or use of absorbents. Leaking containers will be repaired immediately. The floor slab will be provided with a continuous curb stop along its entire length to prevent containers from rolling backwards and consequently damaging the secondary containment structure or back wall of the canopy.

**Comment #17:**

**EOG shall confirm:**

- a. the lugger boxes will always have gaskets around the openings on the sides,
- b. the lugger boxes will always remain covered with an exception for filling,
- c. the exterior of the lugger boxes will be clean before they are placed outside, and
- d. that adequate access to inspect the lugger boxes will be available.

EOG confirms that the lugger boxes will always have gaskets around the openings and sides, will remain covered with an exception for filling, the exterior of the lugger boxes will be clean before they are placed outside and adequate access to inspect the lugger boxes will be available.

**Comment #18:**

**EOG Shall explain how the containment area for containers in the lab pack building complies with the requirements of s. NR 640.13, Wisconsin Administrative Code, for preventing contact between the containers and any accumulated liquid.**

The floors in each of the lab pack building rooms will have a containment system designed and constructed to have a continuous base which is free of cracks or gaps and is impervious to the material to be stored, and will contain any hazardous waste discharges, leaks, spills and precipitation until the collected material is detected and can be removed. The doorway of



each of the five rooms will have a 6-inch impervious ramp. Upon room entry there will be a series of grates inset 6 inches above the room floor. This grating system will provide an elevated surface for containers to avoid any chance of contact with accumulated liquids.

**Comment #19:** EOG shall explain how they will respond to spills in the catch basins located in the south and northeast sections of the property.

In the event of a spill in the catch basins, the storm sewer shut off valve will automatically be actuated to prevent discharge. Any spill material contained in the basin will be sampled, analyzed, pumped into drums and stored for off-site treatment or disposal at a fully permitted and licensed treatment, storage and disposal facility.

**Comment #20:** If hazardous waste cylinders are to be stored on site, EOG shall explain what precautions will be taken in handling and storing these cylinders.

Hazardous waste cylinders will be accepted at EOG for storage and transfer only. Cylinders will be received in the lab pack building only and stored according to hazard class in appropriately designated rooms. Cylinders received in small drums or DOT boxes will be re-packaged into larger DOT shippable drums for off-site disposal at a permitted facility. Only properly packaged, identified, labeled and manifested cylinder will be accepted for storage and transfer. No cylinders will be opened or treated.

**Comment #21:** Some confusion has occurred between the original submittal and the followup submittals because of use of attachment in both. The department could not always tell if the attachments in subsequent submittals were designed to fit into the original attachments of the same number, some other attachment, or be an additional attachment. EOG shall explain how these attachments shall be incorporated and submit a revised table of contents that reflects any changes.

The following is an explanation of attachments from EOGs previous submittals:

EOG's February 25, 1995 response to the letter of incompleteness contained the following attachments:

Attachment 1: Replacement Part A Application for Attachment 1 of the FPOR.



Attachment 2 - Replacement pages for Attachment 2, "Needs Assessment" of the FPOR.

Attachment 3 - Replacement pages for Attachment 3, "General Facility Description" of the FPOR.

Attachment 4 - Replacement pages for Attachment 3, "General Facility Description" of the FPOR.

Attachment 5 - Replacement pages for Attachment 5, "Waste Analysis Plan" of the FPOR.

Attachment 6 - Replacement pages for Attachment 6, "Inspection Schedule" of the FPOR.

Attachment 7 - Replacement pages for Attachment 7, "Process Information" of the FPOR.

Attachment 8 - Replacement pages for Attachment 8, "Preparedness and Prevention" of the FPOR.

Attachment 9 - Replacement pages for Attachment 9, "Contingency Plan" of the FPOR.

Attachment 10 - Replacement pages for Attachment 10, "Personnel Training Program" of the FPOR.

Attachment 11 - Replacement pages for Attachment 11, "Closure Plan" of the FPOR.

Attachment 12 - "Waste Code Tally Sheet", this is an attachment of this submittal.

Attachment 13 - Contains a revised Master Table of Contents for the FPOR.

Attachment 14 - Contains a revised Checklist for the FPOR.

Attachment 15 - "Compatibility Testing Procedure" is an attachment of this submittal.

Attachment 16 - Replacement pages for Attachment 3, Appendix F of the FPOR.

Attachment 17 - Replacement Plan Sheets for Attachment 15 of the FPOR.



EOG's April 21, 1995 response contained the following Attachments:

Attachment 18 - Replacement pages for Attachment 7, "Process Information" of the FPOR.

Attachment 19 - "Plan Sheets" is an attachment of this submittal.

Attachment 20 - "Erosion Control" is an attachment of this submittal.

Attachment 21 - "Stress and Containment Calculations" is an attachment of this submittal.

A revised Master Table of Contents containing any changes is located in Attachment 27 of this submittal.







5611 West Hemlock Street • Milwaukee, WI 53223

EOG Disposal, Inc.

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(800) 234-1156

February 22, 1996

Mr. Pat Brady  
Wisconsin Department of  
Natural Resources  
4041 North Richards Street  
P.O. Box 12436  
Milwaukee, Wisconsin 53212

RE: Feasibility Study and Plan of Operation Report  
EOG Disposal, Inc. 5611 West Hemlock Street, Milwaukee, WI  
EPA ID# WID988580056

Dear Mr. Brady,

Thank you for meeting with us regarding the changes we are requesting to make to the Feasibility Study/Plan of Operation Report (FPOR) submitted to the Wisconsin Department of Natural Resources on September 6, 1994. The following is a description of the additional operations we propose to implement before completion of the Phase II retrofit and completion of Phase IV.

These changes are to include a lab pack re-packaging and drum transfer/storage operation in the existing EOG Disposal, Inc. building during the Phase II Retrofit. The lab pack re-packaging operations will allow EOG the capability of re-packaging compatible laboratory chemicals from small containers into larger containers for off-site shipment to permitted Treatment Storage and Disposal Facilities. The transfer/storage operation will allow EOG to store drummed materials until truck load quantities can be sent off-site for Treatment or Recycling. These operations will take place during the Phase II Retrofit and will continue until the Lab pack Depack building is constructed and is operational.

EOG is committed to completing the construction of our hazardous waste management facility as outlined in the FPOR. The overall construction time table will depend on weather conditions and department approvals. The Lab Pack Depack building will be started as soon as the site preparation is completed so that the lab pack re-packaging operations can be moved into the new building. If conditions permit, Phase IV will be constructed in conjunction with Phase V.

The following is a revised construction schedule:

Phase I: Retrofit of the existing building that will include replacement of permeable curbing, installation of a surveillance and alarm system and sealing of floors for acceptance of all wastes with the exception of ignitables. This retrofit will begin March 15, 1996 and is expected to take 2 weeks.



- Phase II: Remaining Retrofit of the existing building. Construction is expected to take 3 months.
- Phase III: Site preparation will begin April 1, 1996 and is expected to take 4-5 months.
- Phase IV: Construction of the Lab Pack Depack building will begin September 1, 1996 and is expected to take 4-5 months.
- Phase V: Construction of the tank farm and roll-off container storage area will begin September 1, 1996 and is expected to take 4 months to construct.
- Phase VI: Addition to the existing EOG Disposal building. Construction timetable has not been determined.

EOG will seek licensing for container storage after Phase I construction and a modification to this license for acceptance of ignitables after Phase II construction. License applications for the remaining phases will depend on construction completion dates. EOG will combine license applications when possible. For example, if the tank farm is completed at the same time as the Lab Pack Depack building, EOG will submit one tank license application for the tanks in the Lab Pack Depack Building and the tank farm.

EOG will be accepting Toxicity Characteristic wastes, hazardous wastes from non-specific sources, hazardous wastes from specific sources, various discarded commercial chemical products, off-specification materials, container residues, spill residues and various laboratory chemicals generated by EOG's existing and future clients. EOG will not accept any ignitable materials until the Phase II Retrofit has been completed.

The layout of the proposed lab pack storage and repackaging areas is illustrated in the attached Figure 1. EOG will set up five separate storage and repack areas that will have distinct boundaries and will be marked with yellow painted lines. The hazard class of the material in each storage/repack area will be clearly communicated by hazardous materials placards corresponding to the materials that are presently in that storage/repack area. The storage areas will be located on both the north side and the southwest corner of existing EOG Disposal building. In each storage/repack area the drums will be placed on spill containment pallets which will elevate the drums 6.5 inches off the floor and will provide enough room to hold either six or eight 55 gallon drums on its surface. The secondary containment capacity for the eight drum pallets is 82 gallons. The secondary containment capacity for the six drum pallets is 61 gallons.

As lab packs are received in 5, 10, 20 and 30 gallon containers they will be placed in appropriately designated storage/repack areas. They will then be depacked and repackaged in



to larger containers. All depacking will be done on top of the containment pallets. Containers in the lab packs will be combined with other containers in the lab packs without opening any of the containers. The contents of the containers in the lab packs will not be combined with any of the containers.

Bulk drummed materials received will be placed in appropriately designated storage areas to await transfer and shipment to permitted TSDFs.

The proposed operations will allow for storage of up to 468 hazardous waste containers and 280 non-hazardous waste containers or any combination of the above.

**STORAGE/REPACK AREA 1:** Is located along the north wall of the facility and measures 40 feet by 30 feet. It has enough area for 20 spill containment pallets (10 x 6 drum pallets and 10 x 8 drum pallets) holding a maximum of 140 x 55 gallon drums of material. This area will be used primarily for the storage and repackaging of hazard class 9 (other regulated materials) containers. The secondary containment for this storage area is 1,430 gallons.

**STORAGE/REPACK AREA 2:** Is located along the north wall adjacent to area 1 and measures 15 feet by 30 feet. It has enough area for 8 spill containment pallets (4 x 8 drum pallets and 4 x 6 drum pallets) holding a maximum of 56 x 55 gallon drums of material. This area will be used primarily for the storage and repackaging of reactive containers. The secondary containment for this area is 572 gallons.

**STORAGE/REPACK AREA 3:** Is located along the south wall of the facility opposite area 1 and measures 18 feet by 30 feet. It has enough area for 8 spill containment pallets (4 x 8 drum pallets and 4 x 6 drum pallets) holding a maximum of 56 x 55 gallon drums of material. This area will be used primarily for the storage and repackaging of corrosive bases (pH > 12.5) containers. The secondary containment for this area is 572 gallons.

**STORAGE/REPACK AREA 4:** Is located along the south wall of the facility and to the west adjacent to area 3. It measures 30 feet by 30 feet and has enough area for 16 spill containment pallets (8 x 8 drum pallets and 8 x 6 drum pallets) holding a maximum of 112 x 55 gallon drums of material. It will be used primarily for the storage and repackaging of poison containers. The secondary containment for this area is 1,144 gallons.

**STORAGE/REPACK AREA 5:** Is located in the southwest corner of the facility and measures 15 feet by 72 feet. It has enough area for 14 spill containment pallets (10 x 8 drum pallets and 4 x 6 drum pallets) holding a maximum of 104 x 55 gallon drums of material. It will be used primarily for the storage and repackaging of corrosive acid (pH < 2) containers. The secondary containment for this area is 1,064 gallons.

The above listed capacities all refer to 55 gallon drums. Pallets may actually contain drums of various sizes such as 5, 10, 20 and 30 gallon containers.

Depending on the quantities of various drums received, the hazard classes specified above for Storage/Repack areas may be interchanged. For instance, if EOG Disposal received 75 drums



of corrosive bases, area 1 may be designated for corrosive base storage and area 3 designated for hazard class 9 storage. Only chemicals that are compatible will be stored in each area. Common incompatibles which will not be stored together include acids with bases, acids with cyanides.

During the day to day operations spills of various materials may occur. The spill containment pallets are designed to prevent spilled materials from spreading throughout the storage/repack areas. In the event of a spill, steps will immediately be taken to clean up the spill and prevent the cross contamination of different wastes. The first step will be to identify the leaking container(s) and to stop the container from leaking the rest of its contents. Next, if there are any other containers on the same pallet as the leaking container they will be moved to another containment pallet in the same storage/repack area. The contents of the leaking drum will then be transferred to a proper container. Any spilled material that was contained in the pallet will also be transferred into this container. The containment pallet will then be decontaminated before it is used again.

The first step in the decontamination process is to soak up any remaining liquids that remain in the spill containment pallet with towels, pigs or other absorbents. The pallet grate and the containment area of the pallet will be washed with a solution of biodegradable degreasing cleaner and water using scrub brushes and rags to physically remove any residue left on the pallet or pallet grate. The pallet grate and the containment area of the pallet will then be triple rinsed with a dilute solution of cleaner and water a total of three times. The resultant contaminated cleaning solution, rinsate, rags and absorbents will be collected into drums and disposed of at a fully permitted TSDF.

After the completion of the Phase II Retrofit and approval of this modification, EOG will be accepting ignitables. Storage Area 1 will be designated as ignitable storage. Precautions taken in the container storage area to prevent accidental fire and explosion include the proper storage of containers (stacking, aisle space, labeling and sealing of containers) dikes and warning signs. Smoking is prohibited. To prevent sources of external ignition, explosion proof electrical equipment will be used in all ignitable liquids storage areas.

Containers holding ignitable waste are stored 50 feet from the property line.

Open flames are prohibited in areas where ignitable wastes are handled.

All containers are compatible to the material stored in them. Incompatible materials are separated and stored in designated areas.

In addition to the storage/repack areas there will also be a supply area for containers, vermiculite and pallets. This will be in the area marked supplies on figure 1. This is the area currently utilized for supply storage and currently occupied by the laboratory. The laboratory walls will be taken down and all equipment will be moved into the area marked as the office.

The additional drum storage illustrated on figure 1 will be utilized for non-hazardous drummed materials. Lab packs will only be placed in designated storage areas 1-5.





It is EOG's policy to manage these wastes in the most cost effective way possible, making sure that no backlog of wastes is stored on-site for extended periods of time.

Completion of the Phase II Retrofit will continue during the lab pack re-packaging and drum transfer/storage operations. Worker safety will be of the utmost importance. Lab Pack re-packaging and transfer/storage operations will not take place while construction workers are working on the retrofit.

During the lab pack re-packaging operations, EOG will adhere to all of the relevant procedures described in the Feasibility and Plan of Operation Report (FPOR). The following is a listing of each of the FPOR Attachments and their related procedures:

Prior to acceptance, a Waste Profile Sheet and lab pack drum inventory for lab packs and waste streams will be completed by the generator or broker and forwarded to the Approvals Coordinator for review as described in Attachment 5, WASTE ANALYSIS PLAN, Section 2 of the FPOR.

Waste Streams will be sampled and analyzed per the requirements of Attachment 5, WASTE ANALYSIS PLAN, Section 4. Shipment Screening will be completed per the requirements of Attachment 5, WASTE ANALYSIS PLAN, Section 5. EOG will follow the Sampling Procedures described in Attachment 5, WASTE ANALYSIS PLAN, Section 7.

EOG will follow the Rejection Procedures as described in Attachment 5, WASTE ANALYSIS PLAN, Section 6.

During the lab pack depack and storage/transfer operations appropriate components of the Inspection Schedule, described in Attachment 6, of the FPOR will be phased into normal operating procedures.

EOG will follow the Operation and Maintenance Procedure described in Attachment 7, PROCESS INFORMATION, Section 2.7.

EOG will follow the Aisle Spacing Requirements described in Attachment 8, PREPAREDNESS AND PREVENTION PLAN, Section 5.

EOG will follow the Service Arrangements described in Attachment 8, PREPAREDNESS AND PREVENTION PLAN, Section 6.

Loading and off-loading operations will be followed as described in Attachment 8, PREPAREDNESS AND PREVENTION PLAN, Section 7.

EOG will follow Preventative and Remedial Actions procedures as described in Attachment 8, PREPAREDNESS AND PREVENTION PLAN, Section 8.2 and 8.4.

EOG will follow the Runoff Prevention Procedures described in Attachment 8, PREPAREDNESS AND PREVENTION PLAN, Section 9.1.



EOG will follow the Employee Exposure Prevention procedures described in Attachment 8, PREPAREDNESS AND PREVENTION PLAN, Section 10.

EOG will follow the Groundwater Contamination Prevention procedures described in Attachment 8, PREPAREDNESS AND PREVENTION PLAN, Section 11.

EOG will follow all of the relevant procedures described in Attachment 8, SPILL PREVENTION CONTROL AND COUNTERMEASURE.

EOG will follow all of the procedures described in Attachment 9, CONTINGENCY PLAN.

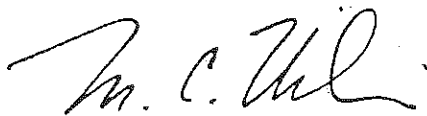
EOG will follow all of the relevant procedures described in Attachment 11, CLOSURE PLAN.

Closure costs for the proposed lab pack re-packaging and drum transfer/storage operations are estimated to total \$128,212.70. These costs are illustrated in the attached Table 1 and Table 2. The recycling/disposal costs listed in these tables are based on an inventory of 60% lab packs and 40% hazardous waste drums. When the lab pack re-packaging operations are moved to the Lab Pack Depack building, the spill containment pallets will continue to be used for operations in the existing EOG Disposal building. Any contaminated spill containment pallets will be decontaminated prior to reuse. The decontamination calculation for the spill containment pallets of \$715 shown in Table 1 and Table 2 is based on decontaminating 20% of the 66 pallets at **no** each.

EOG Disposal currently has an insurance policy for closure in the amount of \$151,503.00 and proposes to continue this policy in its current dollar amount. When Phase IV and Phase V are permitted, the closure amount will be revised to reflect Table 4 in Attachment 11, CLOSURE PLAN, of the FPOR.

We look forward to your comments regarding these proposed changes. If you have any questions regarding this request please contact me.

Sincerely,  
EOG Disposal, Incorporated



Michael C. Vilione, President  
VK Investments (Owner)

cc: Ed Lynch  
Tom McElligott



**TABLE 1**  
**CLOSURE COST ESTIMATE**

Closure Activities	Unit Cost	Quantity	Total (\$)
Recycling/Disposal of Hazardous Waste Drum Inventory	non-responsive	187	\$24,310.00
Recycling/Disposal of Lab-Pack Drum Inventory		281	\$56,200.00
Transportation Costs		6	\$1,800.00
Storage Areas			
-decontaminate floor surfaces		1	\$5,250.00
-rinsate analyses		6	\$6,282.00
-decontaminate containment pallets		13	\$715.00
Closure-Derived Waste Management			
- solid residues		2,500	\$2,500.00
- liquid residues		15,000	\$7,500.00
Engineering			
- closure observation		5	\$6,000.00
- documentation report		1	\$6,000.00
10% Contingency		1	\$11,655.70
Inflation Factor of 1.0195 (1998)			
<b>TOTAL</b>			<b>\$130,712.85</b>
Inflation Factor of 1.02 (1999)			
<b>TOTAL</b>			<b>\$133,327.10</b>
Inflation Factor of 1.02 (2000)			
<b>TOTAL</b>			<b>\$134,660.37</b>
Inflation Factor of 1.015 (2001)			
<b>TOTAL</b>			<b>\$136,680.27</b>
Inflation Factor of 1.021 (2002)			
<b>TOTAL</b>			<b>\$139,550.55</b>
Inflation Factor of 1.023 (2003)			
<b>TOTAL</b>			<b>\$142,481.11</b>
Inflation Factor of 1.011 (2004)			
<b>TOTAL</b>			<b>\$144,048.40</b>
Inflation Factor of 1.0183 (2005)			
<b>TOTAL</b>			<b>\$146,684.48</b>
Inflation Factor of 1.0262 (2006)			
<b>TOTAL</b>			<b>\$150,527.61</b>



**TABLE 2**  
**CLOSURE COST ESTIMATE**

Closure Activities	Hazardous Waste Storage Closure Cost Estimate <sup>1</sup>	Nonhazardous Waste Storage Closure Cost Estimate <sup>2</sup>
Recycling/Disposal of Inventory	\$80,510.00	\$16,600.00
Transportation Costs	\$1,800.00	3
Storage Areas		
- decontaminate floor surfaces	\$5,250.00	NR
- rinsate analyses	\$6,282.00	NR
-decontaminate spill containment pallets	\$715.00	NR
Closure-Derived Waste Management		
- solid residues	\$2,500.00	NR
- liquid residues	\$7,500.00	NR
Engineering		
- closure observation activities	\$6,000.00	NR
- documentation report	\$6,000.00	NR
10% Contingency	\$11,655.70	\$1,660
<b>TOTAL</b>	<b>\$128,212.70</b>	<b>\$18,260.00</b>
Inflation factor of 1.0195 (1998)	\$2,500.15	\$186.16
<b>TOTAL (1998)</b>	<b>\$130,712.85</b>	<b>\$18,446.16</b>
Inflation factor of 1.02 (1999)	\$2,614.25	\$368.92
<b>TOTAL (1999)</b>	<b>\$133,327.10</b>	<b>\$18,815.08</b>





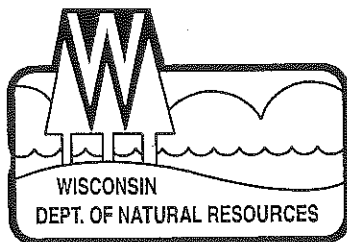
**CLOSURE COST ESTIMATE – Page 2**

Closure TABLE 2 Activities	Hazardous Waste Storage Closure Cost Estimate <sup>1</sup>	Nonhazardous Waste Storage Closure Cost Estimate <sup>2</sup>
Inflation factor of 1.01 (2000)	\$1,333.27	\$188.15
<b>TOTAL (2000)</b>	<b>\$134,660.37</b>	<b>\$19,003.23</b>
Inflation factor of 1.015 (2001)	\$2,019.90	\$285.04
<b>TOTAL (2001)</b>	<b>\$136,680.27</b>	<b>\$19,288.27</b>
Inflation factor of 1.021 (2002)	\$2,870.28	\$405.05
<b>TOTAL (2002)</b>	<b>\$139,550.55</b>	<b>\$19,693.32</b>
Inflation factor of 1.023 (2003)	\$2,930.56	\$452.94
<b>TOTAL (2003)</b>	<b>\$142,481.11</b>	<b>\$20,146.26</b>
Inflation factor of 1.011 (2004)	\$1,567.29	\$221.60
<b>TOTAL (2004)</b>	<b>\$144,048.40</b>	<b>\$20,367.86</b>
Inflation factor of 1.0183 (2005)	\$2,636.08	\$372.73
<b>TOTAL (2005)</b>	<b>\$146,684.48</b>	<b>\$20,740.59</b>
Inflation factor of 1.0262 (2006)	\$3,843.13	\$543.40
<b>TOTAL (2006)</b>	<b>\$150,527.61</b>	<b>\$21,283.99</b>

**NOTES:**

1. Based on Closure Plan Cost Estimate (see TABLE 1)
2. Based on **non-responsive** for disposal and transportation costs
3. Included in disposal of inventory unit cost.





## State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor  
Scott Hassett, Secretary  
Gloria L. McCutcheon, Regional Director

Southeast Region Headquarters  
2300 N. Dr. Martin Luther King, Jr. Drive  
PO Box 12436  
Milwaukee, Wisconsin 53212-0436  
Telephone 414-263-8500  
FAX 414-263-8606  
TTY 414-263-8713

April 6, 2004

In Response Refer To: FID# 241384000  
HW/LIC

Henry Krier, President  
Badger Disposal of WI, Inc.  
5611 West Hemlock Street  
Milwaukee, WI 53223

RE: Conditional Class 1 Modification Determination  
Revised Container Storage Layout from March 16, 2004, Request  
Badger Disposal of WI Inc., 5611 West Hemlock Street, Milwaukee, WI  
EPA ID# WID 988580056,

Dear Mr. Krier:

On March 17, 2004, the Wisconsin Department of Natural Resources (the Department) received from Badger Disposal of WI Inc. (Badger) a class 1 modification request, dated March 16, 2004, regarding a revised container storage layout. In order to incorporate this requested change, the Department is issuing a class 1 plan modification determination. This letter serves notice that the Department has completed its review of the request and is issuing a preliminary determination at this time.

This letter acknowledges the Department's receipt of your April 2, 2004, submittal regarding revisions too the Badger Feasibility and Plan of Operation Report, in response to Condition # 9 from the January 7, 2004, class 2 Modification Determination. Even though the Department does not agree with your procedure for determining the containment area capacity, the Department agrees that the storage area provides adequate containment. A separate letter dated April 6, 2004, addresses the containment area calculations.

You may submit written comments to the Department regarding this preliminary determination within 10 business days of the date of this letter. A final determination may be issued thereafter based on comments we receive. Because this is a class 1 modification, if no written comments are received by the Department by the end of the 10 business day comment period, then the preliminary determination will become a final determination. This plan modification must be kept with the feasibility and plan of operation report determination, the operating license, and all plan modification determinations for the licensed facility.



PRELIMINARY AND FINAL DETERMINATION  
HAZARDOUS WASTE LICENSE AND PLAN MODIFICATION

FINDINGS OF FACT

The Department finds that:

1. On April 19, 1996, the Department issued a feasibility and plan of operation report determination to EOG Disposal, Inc. (now Badger) for a hazardous waste container storage facility at 5611 W. Hemlock St., Milwaukee. On December 16, 1996, WDNR issued to EOG Disposal, Inc. (now Badger) an operating license for hazardous waste container storage at 5611 W. Hemlock St., Milwaukee.
2. The Department has issued plan modification determinations to Badger on May 14, 1997, May 6, 2003, July 17, 2003, January 7, 2004, and January 29, 2004.
3. On March 17, 2004, the Department received from Badger a class 1 modification request, dated March 16, 2004, regarding a revised container storage layout. Enclosed with the request was a \$300.00 check for the class 1 modification review.
4. On April 2, 2004, Badger submitted revisions to the Badger Feasibility and Plan of Operation Report, as required by Condition # 9 of the January 7, 2004, Class 2 Plan Modification Determination. The revisions included revised containment area calculations and the revised Facility Drum Storage Layout Drawing.
5. On April 6, 2004, The Department sent a letter to Badger regarding the revised containment area calculations.
6. Pursuant to s. NR 680.07(2), Wis. Adm. Code, the Department finds this request to be a class 1 plan modification.

CONCLUSIONS OF LAW

1. The Department has promulgated chs. NR 600 to 685, Wis. Adm. Code, establishing minimum requirements for hazardous waste management under the authority of ch. 291, Wis. Stats.
2. The Department has authority pursuant to s. 289.30(6), Wis. Stats., and s. NR 680.07(2), Wis. Adm. Code, to approve a class 1 modification to a license or plan of operation.
3. Any person who owns or operates a hazardous waste facility and proposes to modify that facility's plan approval or license is required to submit a plan modification pursuant to s. NR 680.07, Wis. Adm. Code.
4. Based on the foregoing findings, the Department has the authority, pursuant to s. 289.30(6), Wis. Stats., and s. NR 680.07(2), Wis. Adm. Code, to issue the following license and plan modification.



5. In accordance with s. NR 680.07, Wis. Adm. Code, the Department concludes that the revision described in Findings of Fact no. 3. requires a class 1 license and plan modification.

### DETERMINATION AND CONDITIONS

Based on the foregoing Findings of Fact and Conclusions of Law, the Department hereby approves the March 16, 2004, revised container storage layout, as a class 1 modification request under s. NR 680.07, Wis. Adm. Code, and s. 289.30(6), Wis. Stats., and in accordance with the license and the most recent plan of operation approval and the conditions set forth as follows:

The Department has the right to modify this determination and to require additional information at any time. Nothing in this conditional approval shall relieve the owner or operator of the legal obligation to comply with applicable federal, state and local requirements. Except as may be expressly provided below, no other terms or conditions of the feasibility and plan of operation approval or license, or any subsequent modifications thereto, are affected by this determination.

1. The licensee shall comply with all conditions of the license, the provisions of chs. 289 and 291, Wis. Stats., all applicable requirements of chs. 680 through 685, Wis. Adm. Code, the plan of operation approval, and all modifications thereof, and any special order and modifications thereto issued by the Department, except as otherwise authorized by the Department under ss. NR 600.09 or 680.50, Wis. Adm. Code.
2. Badger shall store containers within the pattern laid out on the plan sheet named *Facility Drum Storage Layout*, labeled *Sheet 1 of 1, Revision Level 3*, with a revision date of March 3, 2004.

(This is a revised version of Condition # 2 from the January 29, 2004, Class 1 Plan Modification Determination.)

3. Badger is limited to storing 720 55-gallon hazardous waste containers in the licensed hazardous waste container storage area in the Container Storage Building. Badger also has a limit of 1,500 55-gallon drums of solid non-hazardous waste in the Container Storage Building. The container storage areas in this building overlap in a defined area (*Facility Drum Storage Layout*, labeled *Sheet 1 of 1, Revision Level 3*, with a revision date of March 3, 2004). A maximum of 860 55-gallon drums can be stored on one level and 1,720 55-gallon drums can be stored, when drums are stored two high. For hazardous waste storage, Badger will store only hazardous waste solids and lab packs two high. The total of 720 55-gallon containers of hazardous waste and 1,500 55-gallons of solid waste (2,220 55-gallons) is greater than the allotted space for the area (1,720 55-gallon drums). Badger shall use the following formula to ensure that limits on waste storage are met.

1,720 55-gallon drums = [X (the total number of liquid hazardous waste (non-solid hazardous waste and non-labpack hazardous waste) 55-gallon drums) x 2] + Y (the total number of hazardous waste solids and lab pack 55-gallon drums) + Z (the total number of solid waste 55-gallon drums). Where X + Y can not exceed 720 55-gallon drums, and Z can not exceed 1,500 55-gallon drums. The formula is for 55-gallon drums and their equivalents as shown in Condition # 7, of the January 7, 2004, class 2 plan modification determination.





(This is a revised version of Condition # 3 from the January 29, 2004, Class 1 Plan Modification Determination.)

4. Badger shall maintain the lines on the floor of the container storage area to clearly show the container layout pattern shown on the plan sheet named *Facility Drum Storage Layout*, labeled *Sheet 1 of 1, Revision Level 3*, with a revision date of March 3, 2004.

(This is a revised version of Condition # 4 from the January 29, 2004, Class 1 Plan Modification Determination.)

5. If no written comments are received by the Department within the 10 business day comment period, this preliminary determination shall become the Department's final determination. If comments are received, a final determination will be issued after the Department evaluates the comments

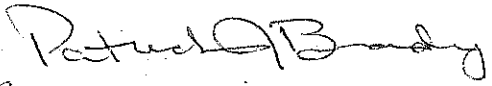
#### NOTICE OF APPEAL RIGHTS


If you believe you have the right to challenge this decision, you should know that Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to ss. 227.52 and 227.53, Wisconsin Statutes, you have 30 days after the decision is mailed, or otherwise served by the Department, to file your decision with the appropriate circuit court and serve the petition to the Department. Such a petition for judicial review shall name the Department of Natural Resources as the respondent. This notice is provided pursuant to s. 227.48(2), Wisconsin Statutes.

Please contact Patrick Brady at (414) 263-8594 if you have any questions.

WISCONSIN DEPARTMENT OF NATURAL RESOURCES  
FOR THE SECRETARY

Sincerely,

  
For Franklin C. Schultz  
Waste Management Team Supervisor  
Southeast Region

  
Patrick Brady  
Waste Management Engineer  
Southeast Region

- c. SER Casefile (F. Schultz, S. Miller, P. Brady)  
Bureau - WA/3 (D. Kollasch)  
Denise Reape - U.S. EPA - Region 5, DM-7J

